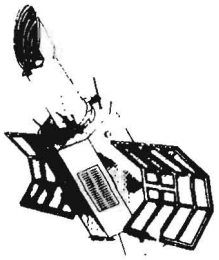

IUE esa NEWSLETTER

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NO.19 APRIL 1984

IUE ESA NEWSLETTER

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OBSERVATORY CONTROLLER'S MESSAGE

When this Newsletter goes to press the ultraviolet astronomical community is getting ready for the IUE Conferences in Goddard (3 - 6 April) and in Rome (15 - 18 May). A glance at the programmes shows that the IUE satellite still provides very important data for Astrophysics. On both sides of the Atlantic, the IUE Selection Committees have done their difficult tasks efficiently. They had to divide the available time for observing under a nearly three times over-subscription. The allocation results can be found in this Newsletter on page 17 for ESA and on page 23 for NASA.

In the meantime, the VILSPA IUE Observatory has gone through a major hardware overhaul. For a variety of reasons it had become necessary to replace the Xerox Σ - 9 Computer. After careful consideration, the choice was made to replace it with a Telefile T - 85. The installation of the T - 85 was finished in the middle of March and the ESA IUE Observatory is again fully supporting IUE observing from VILSPA. I want to express our appreciation to our American colleagues at GSFC for their assistance in maintaining the 'VILPSA' shift during the actual change-over. Essentially no European science time has been lost in this effort. It was also useful experience for some of our R.A.'s to operate IUE from Goddard. I would also like to thank the staff of INTA, our Spanish Maintenance and Operations contractor, and the pesonnel from Telefile, whose efforts have been very important for the successful change-over.

An important change in the staff of the Observatory at VILSPA has been the departure of Piero Benvenuti. He left his post as Observatory Controller to take up duties as Head of the European Coordinating Facility (ECF) for the Hubble Space Telescope in Garching on 1st March. I think I can safely thank him here, in the name of the European IUE Community, for his many years of devoted service to the IUE project. All of us wish Piero much success in this new position.

I would like to draw your attention to the modified de-archiving procedures (page 15). It is expected that this will improve the accessibility of IUE data.

I wish you successful observing during the 7th round of IUE Observations, which has just started.

Willem Wamsteker
Acting Observatory Controller.

FOURTH EUROPEAN IUE CONFERENCE

Dear Colleague,

In response to the first announcement more than 150 scientists have expressed their interest in participating at the Fourth European IUE conference. About 120 titles have been proposed as contributed papers, and ESTEC has provided the authors with the camera ready kits for the abstracts and the final manuscripts.

The second announcement with the hotel reservation card and some general information has been sent to the prospective participants. The very late participants may address themselves to:

Appian Line
Via Veneto, 84
I-00187 Roma, Italy
Tel.: (0)6-4741641
Tlx.: 610193 APPIAN

But please remember that the deadline for hotel reservation was March 20.

The inauguration ceremony will be held in the hall of the Protomoteca in Campidoglio, on May 15 at 17:00.

The scientific sessions will be held in the main conference hall of the National Research Council (CNR), Piazzale Aldo Moro, 7, from May 16 to 18 (09:00 to 18:00). Thursday afternoon will be devoted to a discussion on future ultraviolet experiments, including Columbus, with the participation of ESA and NASA scientists.

We are planning to publish the Conference proceedings as quickly as possible as an ESA Special Publication.

Therefore, the camera ready kits for the contributed papers should be in the hands of the Editors by the date of the meeting.

We are looking forward to meeting you in Rome next May.

The Local Organizing Committee:

Istituto Astrofisica Spaziale
C.P. 67
I-00044 Frascati, Italy
Tel.: (0)6-9425651
Tlx.: 610261 CNRFRA

IUE LOW-DISPERSION SPECTRA REFERENCE ATLAS

Part 1. Normal Stars

A. Heck, D. Egret, M. Jaschek, C. Jaschek

We are pleased to announce that the first volume of this Atlas, the result of a long collaboration between the Vilspa IUE Observatory and Centre de Données Stellaires, Strasbourg, is now available under the reference ESA SP-1052.

It contains low dispersion IUE spectra of 229 stars with the aim of establishing and illustrating reference spectral sequences in the UV range, staying as far as possible within the general MK frame. This volume deals with stars exhibiting normal behaviour in the UV, in addition to a few peculiar objects which illustrate typical abnormalities.

For each star the Atlas supplies:-

A graphic spectrum (1150-3200Å in 2Å steps) also available on magnetic tape (see below).

A flux table (in 5Å steps).

UV spectral type, MK classification and other basic astronomical data.

A set of transparent overlays of the 34 most representative spectra are provided to allow direct intercomparison.

The volume and overlays, published by the European Space Agency (reference ESA SP-1052) can be ordered from:-

Scientific and Technical Publications Branch
ESTEC
Postbus 299
NL - 2200 AG Noordwijk
The Netherlands.

The magnetic tape of fluxes in 2Å steps can be obtained from:-

Centre de Données Stellaires
Observatoire Astronomique
11, rue de l'Université
F-67000 Strasbourg
France.

When I was One,
I had just begun.

When I was Two,
I was nearly new.

When I was Three,
I was hardly Me.

When I was Four,
I was not much more.

When I was Five,
I was just alive.

But now I am Six, I'm as clever as clever.
So I think I'll be six now for ever and ever.

—Now We Are Six

ON THE SIXTH BIRTHDAY OF IUE

MISCELLANEOUS

Report on the Boulder Conference (Newsletter No.18 p33)

The omission of two lines from the original printing was pointed out by the author, and due to the confusion that the error could cause, we reproduce below a corrected version of the affected paragraph.

7. FUTURE UV MISSIONS

A. Davidson (Johns Hopkins) reviewed the Hopkins UV Telescope (90cm) project which is designed for spectrophotometry in the 900-1200 Å region with 3 Å resolution. This will be mounted alongside a UV imaging experiment and WUPPE (Wisconsin UV Photo-Polarimeter Experiment) on the Spacelab instrument pointing system and flown on 3 Shuttle missions in 1986/87. The combination is intended for use by guest observers and it is hoped to observe Comet Halley on the first flight. Other projects reviewed include the Extreme UV Explorer (EUVE), an all sky survey satellite for the 100-912Å band, incorporating a grazing incidence spectrometer (S. Bowyer, Berkeley), and STARLAB, an Australia-Canada-US 1m orbiting telescope intended for spectroscopy (1000-8000Å) and wide-field (0.5°) imagery which might be launched "about 1990 ish" (C. Anderson, Wisconsin), and FUSE/COLUMBUS which will be designed for spectroscopy in the range 80-~2000Å and will have grazing incidence optics (A. Boggess, GSFC). Boggess gave an estimate of 150 M$ for the cost of COLUMBUS and said that NASA is looking towards ESA as a possible 50% partner in the project.

Spacecraft Status Report (Newsletter No.18 p11-20)

The following corrections and additions should be made to the status report, where changes have been indicated by underlining.

In the text:-
P16 Section IV D iii) should read Cassatella et al 1982
P18 Section IV H v) should read Panek et al, 1982

In the reference list:-
Holm, A.V., 1981, NASA IUE Newsletter No.15 p70
Holm, A.V. & Panek, R.J. 1982 NASA IUE Newsletter No.18 p56

To be inserted in the reference list:-
Holm, A.V., Bohlin, R.C., Cassatella, A., Ponz, D.
& Schiffer III F.H. 1982 Astron. Astrophys. 112, 341
Panek, R.J. 1981 Report to the Three Agencies

SCHEDULER'S NOTE: EARTH PASSAGE AND SKYMAPS

One of the subjects on which the skymap provides information is the occultation by the Earth of targets to be observed. We can see (figure 1) a central strip corresponding to the portion of the sky occulted by the Earth during the daily satellite orbit. The timeline on the top of the figure tells us where and when the Earth is as seen from IUE. Therefore we can predict whether or not a star will be occulted.

During the Vilspa shift, the affected part of that strip is comprised roughly between 0h. +12° and 2h. -4° at the beginning of the shift and 6h. -26° and 7h 20m -28° at the end.

In addition we can see on the top of the figure (shaded circles) the part of the Earth which is illuminated. Hence we can predict whether or not scattered light from it may prevent the observation, even though the star is only close to the Earth pass rather than occulted by it.

Some of the IUE Users have noticed that in the monthly skymaps for the 7th round of IUE there was a strong discrepancy between that definition of the currently Vilspa-occulted region and the timeline for the Earth passage. This discrepancy was increasing more and more every month. Therefore targets which appeared not to be subject to this observing constraint turned out to be occulted by the Earth. What had happened? The answer is straight-forward and fully explainable in terms of the drift in the orbit of 0.1 deg/day.

The program which computes the skymap has as principal input the orbital elements of IUE. These elements are changing and their values are updated every week or ten days. (That is the purpose of the so-called "rangings" that sometimes make you lose five minutes of observing time.) The Skymap program is usually run with the latest orbital elements but its variation is not taken into account and hence the long term predictions of the relative positions of the Earth and IUE are incorrect. (No other constraints are affected because they are defined relative to the Sun which is independent of the IUE orbit).

When a Delta-V burn$ is performed, the orbital elements change considerably and the forecast is no longer valid.

This is the explanation. The last set of monthly skymaps was computed when the orbital drift was still in the westward direction due to an unsuccessful Delta-V burn in January. A second successful Delta-V burn was performed in February, which stopped the westward drift and induced an eastward drift into IUE's orbit. Therefore the first prediction for Earth passage was incorrect. Now we have computed new skymaps and the Earth avoidance for Vilspa is again where it ought to be.

In conclusion, you have to worry about the Earth only if your targets are in the region shown in figure 1. In such a case you will have to observe them at the beginning or the end of the shift depending on where they are. If you have long exposures they will be interrupted if the target is in the middle of the Earth path or they can be optimised by scheduling the shift at the beginning or the end of the month if the target is in one of the ends of the Earth path. In the latter case you should inform us as soon as possible. In any case, an accurate forecast for the Earth passage time cannot be made very much in advance.

A. TALAVERA
IUE Scheduler.

NOTE: If any of you is interested in a new set of monthly skymaps for the period April-84/April-85, please let us know and we shall send them.

$ The Delta-V burn is a maneuver performed approximately every ten months, the purpose of which is to keep the orbit of IUE adjusted in such a way that it does not violate the viewing constraints of the two observatories (GSFC = 24 hours, Vilspa $\geq$ 10 hours per day).

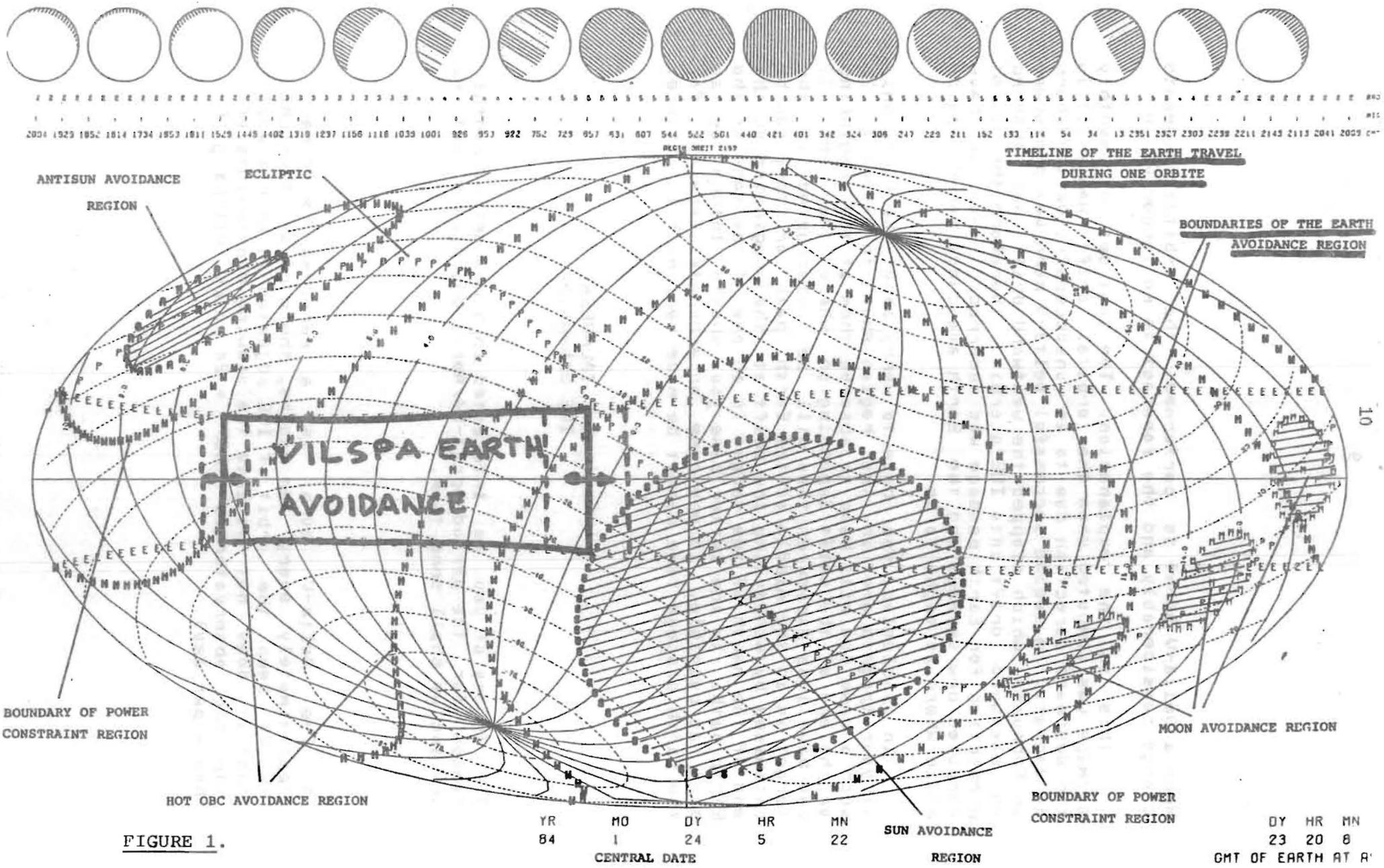
TIMELINE OF THE EARTH TRAVEL
DURING ONE ORBITE
ANTISUN AVOIDANCE
REGION
ECLIPTIC
BOUNDARIES OF THE EARTH
AVOIDANCE REGION
VILSPA EARTH
AVOIDANCE
BOUNDARY OF POWER
CONSTRAINT REGION
HOT OBC AVOIDANCE REGION
MOON AVOIDANCE REGION
BOUNDARY OF POWER
CONSTRAINT REGION
SUN AVOIDANCE
REGION
YR MO DY HR MN
84 1 24 5 22
CENTRAL DATE
DY HR MN
23 20 8
GMT OF EARTH AT A'

FIGURE 1.

ON THE TRAIL OF PERIODIC VARIATIONS

It is well known that the superb versatility of IUE allows the observer to obtain trailed low-dispersion spectra of his (brighter) targets if he so desires. Brief discussions of the technique are given by Clavel (1980) and Heck (1981). The original standard procedure enables the trail rate (within the range 0.03 - 60 arcsec/sec) and the number of interations, or passes, to be specified. The satellite then trails the target automatically backwards and forwards along the large aperture.

One rather special case for which trailing is useful is the study of objects exhibiting rapid periodic intensity variations. If the trail rate is chosen so that the time taken for a pass across the aperture is equal to the target period, then the full intensity variation will be spatially encoded perpendicular to the dispersion line of the resulting spectrum. In practice, of course, such targets are not as bright as one might hope and it is usually necessary to superimpose a number of synchronised unidirectional trails to build up the signal-to-noise ratio. Since the original trail procedure was not designed for this purpose attempts at using it for such have caused considerable frustation. Recently, however, the trail procedure has been modified to allow a series of synchronised unidirectional trails to be carried out without causing the telescope operator to foam at the mouth.

At the beginning of the trail procedure the target is moved from the reference point and positioned at a start point a short distance from the aperture. The new procedure is identical to the original one until the first pass has been completed. Then, instead of returning the target to the start point by executing a reverse pass at the specified trail rate, the new procedure temporarily halts the exposure and returns the target directly to the start point, taking it rapidly across the aperture. Any positional errors are corrected at this point before the command is given to restart the exposure and commence the next iteration. Experience has shown that the start of each pass can be timed to within a few seconds, which is quite adequate if the period of the target is in excess of 100 seconds.

The number of passes, N, required for a target with period T and untrailed exposure time t is given by:

$$N = \frac{3.2t}{T}$$

The required trail rate is simply 20/T, where 20 refers to the length of the large aperture in arcsec. The limits on the trail rate remain as quoted above.

Having obtained such an image one is left with the non-trivial problem of analysing it for intensity variation. A simple form of analysis would be to take 3 well separated samples each more than 8-10 pixels apart. There is, however, still some residual contribution, of the order of 10-15% from adjacent samples due to a weaker, broader gaussian component of the point-spread-function (PSF). To tackle the problem thoroughly one needs to apply a deconvolution process to the data, such as the Maximum Entropy Method (see Gull and Daniell, 1978, for an introduction). Using this approach, time resolution down to 15-20% of the period has been achieved, although one must be careful with the changing form of the PSF with wavelength and camera head amplifier temperature (de Boer et al., 1980 Cassatella et al., 1983).

The technique has been applied to a search for UV variability in X-ray pulsators, which are accreting binary systems incorporating spinning neutron stars. Some results are shown in Figures 1 and 2. It can be applied equally well to other types of source having a known, coherent short period and enables some degree of high time resolution to be achieved with IUE.

Malcolm Coe, University of Southampton, UK

Alan Harris, VILSPA

REFERENCES

Cassatella, A, Barbero, J. and Benvenuti, P., 1983, ESA IUE Newsletter, No. 18, P. 38.

Clavel, J., 1980, ESA IUE Newsletter, No. 6, P. 39.

de Boer, K.S., Koorneef, J. and Meade, M.R., 1980, "The First Two Years of IUE", NASA Conference Publication 2171, P. 771.

Gull, S.F. and Daniell, G.J., 1978, Nature, 272, 686.

Heck, A., 1981, ESA IUE Newsletter, No. 9, P. 10.

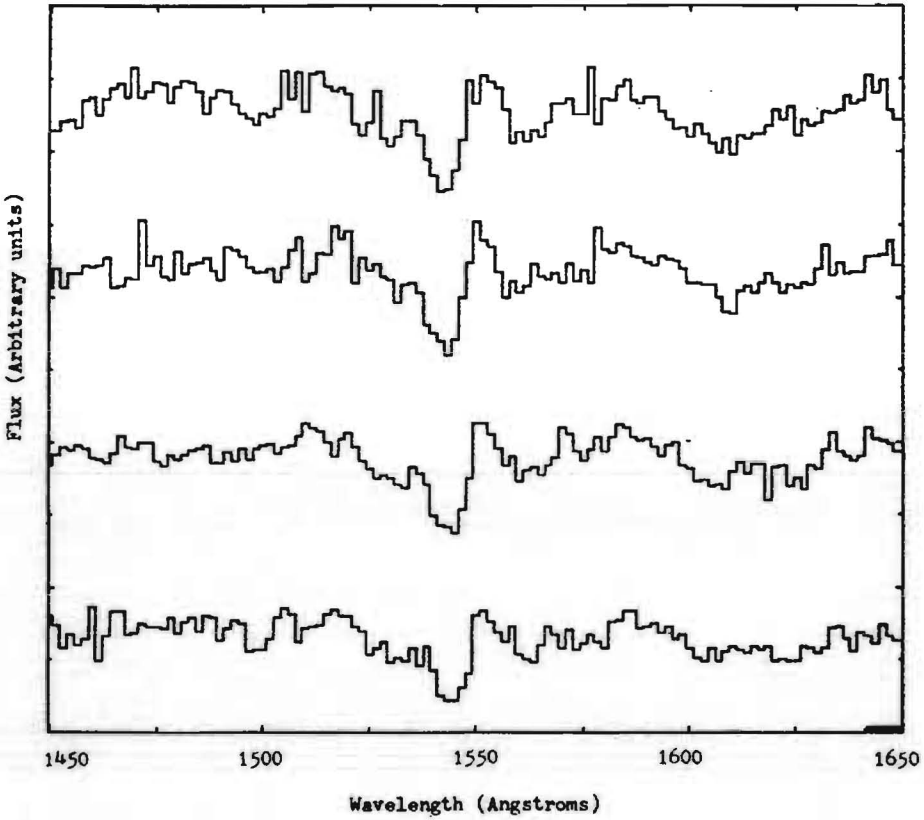

FIGURE 1:

Section of an IUEDR (see IUE Newsletter no. 17, page 53) line-by-line image centered on the C IV line. The spectra shown are individual pseudo-orders taken from a trailed image of the binary pulsator Vela X-1. Consecutive orders represent the spectrum in consecutive time intervals of about 15 seconds.

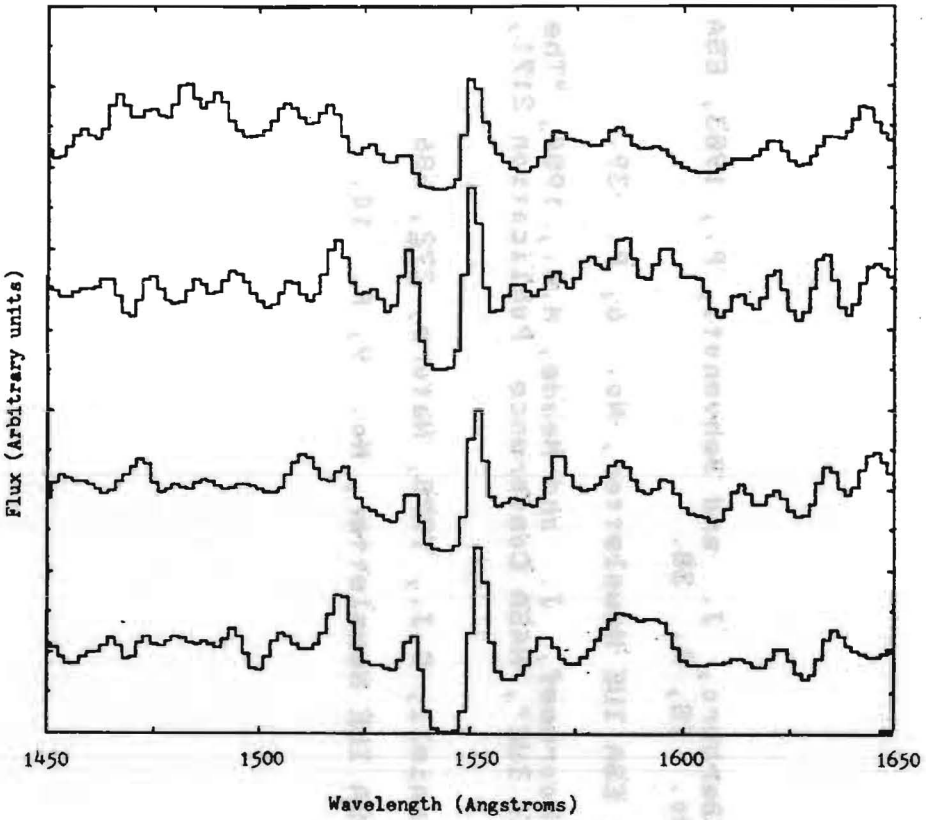

FIGURE 2:

The same diagram after deconvolving the SWP camera point-spread function from the data using a program based upon the Maximum Entropy technique. Changes in the line profiles from one pseudo-order to the next can clearly be seen.

VILSPA DATA BANK NEWS: DEARCHIVING

Thanks to the efforts of our Computer Section, the procedures for data retrieval of IUE spectral images have been fully automated for the benefit of the IUE users community.

As a consequence, new Tape Archive Retrieval forms have been prepared. The new forms (see next page) should be used from now on.

Also, a new policy has been jointly adopted by the three IUE Agencies, for the release of images obtained during Maintenance time (PHCAL program) at either GSFC or VILSPA ground stations. These images, (generally of IUE photometric standards, of on-board calibration lamps, and other test images) will not follow anymore the same 6-month rule, applicable to ordinary images, but will immediately be available to IUE users. One of the advantages of this new policy is that direct comparisons will be possible with IUE standard stars obtained close in time. This is particularly useful when dealing with observations of variable stars.

Angelo CASSATELLA

TAPE ARCHIVE RETRIEVAL

DATA TAPE:

TAPE DENSITY ◯ 1600 bpi (default) ◯ 800 bpi

REQUESTED DATA ◯ Raw Data Only

◯ Complete: Raw image + Extracted Spectra

◯ Extracted Spectra Only

CAM #	IMAGE #	CAM #	IMAGE #	CAM #	IMAGE #	CAM #	IMAGE #

CAMERA NUMBERS: 1 = LWP / 2 = LWR / 3 = SWP / 4 = SWR

REASON DATA IS ACCESSIBLE:

◯ Normal Release (6 month rule)

◯ Special Release ◯ data from my programme .....

◯ maintenance data

◯ others (give details) .....

.....

REQUESTED BY: ..... DATE OF REQUEST: .....

MAILING ADDRESS: .....

.....

.....

DATA BANK R.A.

....

7th year Accepted Proposals from European Community

for INTERNATIONAL ULTRAVIOLET EXPLORER

Program Title	P. A.	Institute	NUMBER
The eclipse of Epsilon Aurigae	Stickland	RGO	GI 004
The proteplanetary nebula V 1016 Cyg	Nussbaumer	Zurich	GI 007
Massive post-main-sequence envelope objects of the LMC	Wolf	Heidelberg	GA 008 GA 008
Spectroscopy of Hot White Dwarfs	Reid	Sussex	GA 009
Stellar populations in lenticular galaxies	Ellis	Durham	GE 010 GE 010
Mg II emission in shortest period contact binaries	Rucinski	Cambridge	GC 011 GC 011
The symbiotic star HBV 475	Nussbaumer	Zurich	GI 013
High velocity gas associated with galactic radio loops	Bates	Belfast	GM 015 GM 015
Diffuse Lyman Alpha emission from dominant galaxies	Norgaard	Copenhagen	GQ 017 GQ 017
The neighbourhood of the Wolf-Rayet star EZ CMa	Schmutz	Zurich	GM 021 GM 021
The symbiotic star CH Cygni	Hack	Trieste	GC 022
The atmospheric eclipsing binary Epsilon Aurigae	Hack	Trieste	GC 023 GC 023
Mass-loss of Red Giants with Hot Companions	Reimers	Hamburg	GC 024 GC 024
Chromospheric modelling of late-type dwarfs	Beckman	London	GC 025 GC 025
Winds and Coronae in Red Giants	Reimers	Hamburg	GC 026
High-resolution study of CIII and Si III lines in hybrid stars	Reimers	Hamburg	GC 027 US #099
Effects of binarity and age in the chromospheric activity of rapidly rotating very late-type stars	Rucinski	Cambridge	GC 028 GC 028 GC 028
A study of the excitation mechanisms in Galaxies showing strong line emission	Ward	Cambridge	GE 030 GE 030 GE 030
IUE Observations of eclipsing cataclysmic variables	Horne	Cambridge	GI 031 GI 031
Spectrophotometric investigation of very low excitation (VLE) compact nebulae in the Magellanic Clouds	Nandy	Edinburgh	GA 032 GA 032 GA 032
Interstellar matter in OB associations	Somerville	London	GM 036
Interstellar molecular lines	Somerville	London	GM 037
Ultraviolet spectrophotometry of Hot Galaxies	Wilson	London	GE 038 US #237
Coordinated UV and X-ray observations of Xi Per	Prinja	London	GA 039 GA 039
Investigation of the Remnant Shell of the North Polar Spur Supernova	Innes	London	GM 040 GM 040
IUE observations of high-inclination close binary systems	Mason	Mullard	GI 041 US #029
Changing physical conditions in the X-ray binary HZ Her/Her X-1	Howarth	London	GI 042 GI 042

Interstellar extinction and a study of early type supergiants in the SMC	Nandy	Edinburgh	GM 045 GM 045
The stability of the IO Torus	Bertaux	Verrieres	GS 048
Deuterium in the upper atmosphere of Venus + monitoring of SO2 in upper atmosphere	Bertaux	Verrieres	GS 050 GS 050 GS 050
Observations of 2 variable Seyfert Nuclei	Ulrich	Munchen	GQ 052 GQ 052
The long-term variability of the Lyman alpha emission from Jupiter, Saturn, and Uranus	Fricke	Bonn	GS 054 GS 054 GS 054
UV observations of stars rotating very close to the theoretical break-up velocity	Molaro	Trieste	GA 055 GA 055 GA 055
Non-LTE analysis of central stars of planetary nebula	Kudritzki	Munchen	GA 056 US #034
UV spectrophotometry of compact blue dwarf galaxies	Gondhalekar	RAL	GE 057 GE 057
UV spectrophotometry of quasar Q1011 + 25 (TON 490)	Gondhalekar	RAL	GQ 058 GQ 058
UV spectrophotometry of compact radio nuclei of nearby galaxies	Gondhalekar	RAL	GQ 060 GQ 060
The UV line spectrum of the Seyfert I Galaxy ESO 438-G9	Kollatschny	Gottingen	GQ 064 GQ 064
Rapid variability in the stellar wind of a subdwarf O-star	Howarth	London	GA 067 GA 067
Multiple nucleus Seyfert Galaxies	Kollatschny	Gottingen	GQ 068
The nucleus of NGC 1705	Cacciari	Bologna	GE 071
Stellar activity cycle in Beta Hydri	Dravins	Lund	GC 072 GC 072
Stellar winds in nearby galaxies	Bianchi	Torino	GE 073
Phase resolved spectra of LMC X-1	Bianchi	Torino	GI 074
IUE observations of FK comae stars with simultaneous ground-based	Bianchi	Torino	GC 075 GC 075
UV observations of supernovae	Panagia	Bologna	GE 078
An analysis of the subdwarf-B eclipsing binary BD-7 3477	Lynas-Gray	London	GA 079 GA 079
A large scale survey of interstellar absorption in the galactic halo	West	Manchester	GM 081 GM 081 GM 081
UV observations of recently identified X-ray binaries	Bianchi	Torino	GI 082 GI 082
Observations of Orion variables emitting soft X-rays	Bianchi	Torino	GC 083 GC 083
UV observations of active late-type stars (newly identified soft X-ray emitters)	Bianchi	Torino	GC 084 GC 084 GC 084
Evolved globular cluster stars	Caloi	Frascati	GA 086
Extreme horizontal branch stars	Caloi	Frascati	GA 087
Limb crossing of an active region on Sigma Gem	Engvold	Oslo	GC 089 US #072
A precise radial velocity study of the Si IIII lambda 1892 and C IIII lambda 1909 emission of Beta Draconis winds or antiwinds?	Engvold	Oslo	GC 090 US #075 GC 090 GC 090
Atmospheric inhomogeneities in late type dwarf stars	Moe	Oslo	GC 091 GC 091
Non-LTE analysis of subdwarf O-stars	Heber	Kiel	GA 093
UV observation of White Dwarfs from Hipparcos program	Vauclair	Toulouse	GA 094 GA 094

Spectral photometry of Blue Stragglers	Schonberner	Kiel	GA 095 GA 095
High dispersion spectroscopy of the Hot, Pulsating White Dwarf PG1159-035	Wehrse	Heidelberg	GA 096 US #215
High dispersion observations of Planetary Nebulae	Koppen	Heidelberg	GM 097 GM 097
Stellar wind variations in the enigmatic sublumineus star HD 45166 (qWR + B8V)	Willis	London	GA 100 GA 100 GA 100
Spectral analysis of blue halo stars	Heber	Kiel	GA 101
Blue edge of the ZZ Ceti instability strip	Vauclair	Toulouse	GA 102 GA 102
Stellar activity in regular-period RS CVn-like stars	Fernandez	Madrid	GC 103 GC 103
Search for H2 aurora and acetylene on Uranus and Neptune	Combes	Meudon	GS 104 US #276
Studies of near-halo gas	Harris	Vilspa	GM 106
Simultaneous ground based and UV observations of Post T-Tauri stars	de la Reza	R. de Janeir	GC 108 GC 108 GC 108
Reconstruction of the hot stellar population in the giant HII region NGC 604	Sanz	Madrid	GE 109 GE 109 GE 109
Simultaneous IUE-ground base observations in symbiotic stars	Leibowitz	Tel Aviv	GI 110 GI 110 GI 110
Ultraviolet study of chamaeleon T association	Gahm	Suecia	GC 112 US #127
Existence of a nearby Ly alpha forest absorber?	Bergeron	Paris	GQ 113 GQ 113
Degree of excitation of the sharp absorption line systems of lower redshift observed in quasar spectra	Bergeron	Paris	GQ 114 GQ 114 GQ 114
Observations of Halo Planetary Nebulae	Clegg	London	GM 115 GM 115
Profiles of resonance lines in Planetary Nebulae produced by scattering and by velocity fields	Clegg	London	GM 116 GM 116 GM 116
Ultraviolet observations of interacting galaxies	Joseph	London	GE 118 GE 118
Low resolution observations of apparently normal, unreddened high-latitude, eleventh magnitude B stars	Tobin	Marseille	GA 120 GA 120 GA 120 GA 120
The enveloppe of the over-contact binary AW UMa	de Jager	Utrecht	GC 122 GC 122
UV observations of the hot hydrogen-deficient star HD144941	Jeffery	St Andrews	GA 123 GA 123
Extragalactic HII regions	Rosa	Munich	GE 125
High resolution short wavelength observations of the herbig Ae star HD 250550	Talavera	Vilspa	GA 126 GA 126 GA 126
Simultaneous UV, X-Ray and optical observations of NGC4593	Clavel	Meudon	GQ 127 GQ 127
Ultraviolet studies of the shells of Herbig Ae and Be stars	Tjin A Djie	Amsterdam	GA 133 GA 133
Mass-loss of Cepheids Variables	Deasy	Dublin	GC 134
Atmospheric structure of RSCVn stars	Doyle	Ireland	GC 135 GC 135
Evolution and chemical enrichment in blue compact galaxies	Olafsson	Sweden	GE 136 GE 136

Orange giants of fundamental importance	Gustafsson	Sweden	GC 137 GC 137
Formation of UV continua and faint emission lines in Herbig-Haro objects	Mundt	Heidelberg	GM 138 US #021 GM 138
Simultaneous X-ray, ultraviolet, optical and infrared observations of RU Lupi	Giovannelli	Frascati	GC 142 GC 142 GC 142
UV monitoring of the P Cygni star AG Carinae	Barylak	Vilspa	GA 144 GA 144
Probing the wind of P Cygni by studying the variable shell of 1983-84	Lamers	Utrecht	GA 146 GA 146 GA 146
UV observations of classical novae	Cassatella	Vilspa	GI 147
Intervening gas investigations by IUE observations of the UV-bright central object in NGC 2018 and other young globular clusters in the LMC	Geyer	Bonn	GM 148 GM 148 GM 148 GM 148 GM 148
The stellar content of young open and globular clusters in the Magellanic Clouds	Cassatella	Vilspa	GE 149 GE 149 GE 149
High resolution ultraviolet spectral of cool carbon stars	Gustafsson	Sweden	GC 150 US #250
Anomalous ultraviolet stars	Carnochan	London	GA 153
The eclipsing cataclysmic variables V2051 Oph and PG1012-029	Hill	St Andrews	GI 155 GI 155
Interacting binaries	Drechsel	Bamberg	GI 156
Observations of Lyman-alpha halos of galaxies, using QSOs as background probes	Blades	Baltimore	US #254 GE 157 GE 157
UV spectroscopy of emission line gas in the Central Galaxies of X-ray luminous clusters	Blades	Baltimore	GQ 158 US #216 GQ 158
Search for circumstellar UV extinction towards stars with cool circumstellar dust	van der Hucht	Utrecht	GM 163 GM 163 GM 163
The chromospheres, Coronae and Winds of Hybrid bright giants	Jordan	Oxford	GC 167 US #107
The chromospheres, coronae and winds of low gravity stars	Jordan	Oxford	GC 168 US #094
The evolution of stellar chromospheres	Jordan	Oxford	GC 169 US #019
Chromospheres of Red Giant stars in globular clusters	Jordan	Oxford	GC 170 US #271
High and low dispersion spectral study of active regions in RS Canum Venaticorum systems	Rodono	Catania	GC 171 US #078 GC 171
An ultraviolet study of two bipolar Planetary Nebulae	Kohoutek	Hamburg	GI 172 GI 172
Metallicity and the level of the UV rising branch in elliptical galaxi	Bertola	Padova	GE 173 US #204
Observations of cooling flow galaxies	Fabian	Cambridge	GQ 175
The hot end of HB in galactic globular clusters	Castellani	Roma	GA 176 GA 176
Phase-resolved observations of UV superhumps during dwarf nova superoutbursts	Hassall	Vilspa	GI 178 GI 178 GI 178
Secular changes in quiescent dwarf novae	Hassall	Vilspa	GI 179 GI 179
A far UV extinction of heavily reddened stars in the LMC	Prevot	Marseille	GM 180 GM 180

Three dimensional mapping of the nearby interstellar medium by combined ultraviolet and optical spectroscopy	Grewing	Tubingen	GM 183 GM 183 GM 183 GM 183
Electron scattering and photo-ionisation variations in SCO X-1	Willis	London	GI 184 GI 184
Ultraviolet observations of the radio galaxy 2152-69	Tadhunter	RGO	GQ 185 GQ 185
Ultraviolet observations of the radio galaxy NGC 1052	Tadhunter	RGO	GQ 186 GQ 186
Spatially resolved observations of Saturn and Jupiter at 1700-1900 A and 2100-2600 A	Moore	London	GS 188 GS 188 GS 188
Study of the physical conditions of the interstellar matter between the Sun and Sirius	Gry	Vilspa	GM 190 GM 190 GM 190
Absolute spectrophotometry of faint blue stars for calibration of the Space Telescope	Gry	Vilspa	GA 191 GA 191 GA 191
Observations of IC 4406, NGC 6326, NGC 6629, and NGC 6833	Grewing	Tubingen	GM 195 GM 195
Energy distribution of Be/shell stars	Doazan	Paris	GA 197 GA 197
Simultaneous voyager, IUE, visual observations of active Be stars	Doazan	Paris	GA 198 US #257
The L1551 IRS5 Jet	Doazan	Paris	GC 199
UV observations of liners with known IR and X-ray excesses	Laurence	RGO	GQ 202 GQ 202
UV observations of a complete X-ray selected sample of active galaxies	Boisson	Meudon	GQ 203 GQ 203 GQ 203
Continued monitoring of NGC 4151	Penston	RGO	GQ 205
Line profiles in T Tauri stars	Penston	RGO	GC 206
Expanding shells of interstellar gas around OB associations	Pettini	RGO	GM 207 GM 207
Distances of 21 centimeter high velocity (OORT) clouds	Pettini	RGO	GM 208 US #221
Short time variations in the mass-loss rate of early-type stars	Henrichs	Amsterdam	GA 209 US #189 GA 209
Magnetic braking in cool giant stars	Mangeney	Meudon	GC 210 GC 210
Variable chromospheric activity in the Herbig Ae star AB Aur	Praderie	Meudon	GA 211 US #158
Ultraviolet observations of newly discovered X-ray sources	Bonnet-Bidaud	Meudon	GI 215 GI 215
UV observations of T Tauri stars	Stalio	Trieste	GC 219
Simultaneous UV and X-ray observations of highly polarized QSO's	Maccagni	Milano	GQ 220 GQ 220
Coordinated X-ray and UV observations of magnetic white dwarfs in binaries	Maraschi	Milano	GI 224 GI 224 GI 224
Coordinated UV and optical observations of BL Lac ojbects	Tanzi	Milano	GQ 225 GQ 225
Coordinated UV and X-ray observations of Seyfert galaxies and QSOs	Treves	Milano	GQ 226 GQ 226 GQ 226
Periodic & new comets	Wallis	Cardiff	GS 227
Lyman alpha emission in blue compact emission line galaxies	Deharveng	Marseille	GE 228 GE 228
Lyman continuum observations of broad absorption line QSOs	McMahon	Cambridge	GQ 229 US #245

The interacting binary HD 352 (5 Cet)	Zwaan	Utrecht	GC 230 GC 230
Outer atmospheres of evolved stars of low activity	Zwaan	Utrecht	GC 231 GC 231
Hot-extreem-soft X-ray emitting white dwarfs	Heise	Utrecht	GA 232 GA 232
The 67-min period in EX Hya	der Woerd	Utrecht	GI 233
Dwarf novae in outburst, simultaneously with EXOSAT	Heise	Utrecht	GI 234 GI 234
Am Her revisited, simultaneous with EXOSAT	Heise	Utrecht	GI 235 GI 235
Diffuse light near Zeta Orionis	de Boer	Tubingen	GM 236
Coordinated ultravielet, optical and radio study of stellar flares	Rodono	Catania	GC 243 US #132
UV observations of the secondary component of Algol-type binaries	Catalano	Catania	GI 244 GI 244
Mg II emission of MS stars in open clusters	Catalano	Catania	GC 245 GC 245
Short wavelength high dispersion observations of the giants HD 85444 and HD 141714	Catalano	Catania	GC 246 GC 246 GC 246
Study of the local interstellar medium through MG II absorptions	Molaro	Trieste	GM 248 GM 248
Carbon stars sequence: R to N stars	M. Querci	Toulouse	GC 250 GC 250
Two unique objects in the Large Magellanic Cloud	Israel	Leiden	GE 251 GE 251
High resolution UV spectra of NGC 5236 (=M 83)	Wamsteker	Vilspa	GE 252 US #290
OB association contamination in spectra of SN Evans 1983 in M 83	Panagia	Bologna	GE 255 US #291
Probing Seyfert I nuclei over a large wavelength range	Wamsteker	Vilspa	GQ 256 GQ 256
Variability time scale of lyman alpha from Uranus	Festou	Paris	GS 258 US #227
Extrinsic absorption systems in QSO PKS 1327-206	Kunth	Paris	GQ 260 GQ 260
Observations of Planetary Nebulae with anomalously high neon abundance	Pottasch	Groningen	GM 261 GM 261
Ultraviolet observations of RCB stars	Evans	Keele	GC 262
Ultraviolet extinction properties of Cometary Dust	Evans	Keele	GS 264 GS 264

NASA APPROVED IUE PROGRAMS FOR THE SEVENTH YEAR

NAME	INSTITUTION	COUNTRY	PROG ID	OBSERVATIONAL/ ARCHIVAL
TITLE				
A'HEARN MICHAEL F.	MARYLAND	U. S.	SPGMA	
PERIODIC COMETS				
A'HEARN MICHAEL F.	MARYLAND	U. S.	SCGMA	
COMETS AS TARGETS OF OPPORTUNITY				
ADELMAN SAUL J.	CITADEL	U. S.	HSGSA	
ELEMENTAL ABUNDANCES OF MERCURY-MANGANESE STARS				
ADELMAN SAUL J.	CITADEL	U. S.	AFGSA	
THE POPULATION II A TYPE STAR HD 109995				
AHMAD IMAD A.	IMAD-AD-DEAN	U. S	VVGIA	ARCHIVAL
A STUDY OF INTERACTION DYNAMICS IN ZETA AURIGAE BINARIES				
AKE THOMAS B. III	CSC	U. S.	VVGTA	
EGRESS OBSERVATIONS OF EPSILON AURIGAE				
AKE THOMAS B. III	CSC	U. S.	IBGTA	
THE INTERACTING S STAR BINARY HD 35155				
AKE THOMAS B. III	CSC	U. S.	HCGTA	
OBSERVATIONS OF COOL GIANTS AND SUPERGIANTS WITH HOT COMPANIONS				
ALLER LAWRENCE H.	CAL LA	U. S.	NPGLA	
CHEMICAL COMPOSITIONS, PHYSICAL STATE AND STRUCTURE OF HIGH-EXCITATION PLANETARY NEBULAE				
ALTNER BRUCE M.	A. R. CORP.	U. S.	GCGBA	
UV PROPERTIES OF BLUE HORIZONTAL BRANCH GLOBULAR CLUSTERS				
AUER LAWRENCE	LOS ALAMOS	U. S.	WRGLA	
PHASE DEPENDENT VARIATIONS IN WOLF-RAYET BINARIES: WIND STRUCTURES				
AYRES THOMAS R.	COLORADO-LASP	U. S.	DSGTA	
A FAR-ULTRAVIOLET STUDY OF THE BRIGHT DELTA SCUTI VARIABLE BETA CASSIOPEIA				
AYRES THOMAS R.	COLORADO-LASP	U. S.	RSGTA	
ULTRAVIOLET OBSERVATIONS OF THE LIMB-CROSSING OF AN ACTIVE REGION ON SIGMA GEMINORUM				
AYRES THOMAS R.	COLORADO-LASP	U. S.	MLGTA	
WIND OR ANTIWINDS?				
AYRES THOMAS R.	COLORADO-LASP	U. S.	CSGTA	ARCHIVAL
FAR-ULTRAVIOLET FLUORESCENCE OF CARBON MONOXIDE				

NASA APPROVED IUE PROGRAMS FOR THE SEVENTH YEAR

NAME		INSTITUTION	COUNTRY	PROG ID	OBSERVATIONAL/ ARCHIVAL
TITLE					
BAAN	WILLIAM A.	ARECIBO OBS.	PUERT.RICO	EGGWB	
THE OH MASER OF IC 4553					
BALIUNAS	SALLIE L	CFA - SAO	U. S.	CSGSB	ARCHIVAL
COORDINATED ULTRAVIOLET SPECTROSCOPIC AND OPTICAL PHOTOMETRIC OBSERVATIONS OF CAPELLA					
BALIUNAS	SALLIE L.	CFA - SAO	U. S.	CCGSB	
FLARES & ACTIVITY IN EF AQUARII & LAMBDA ANDROMEDAE					
BARKER	TIMOTHY	WHEATON	U. S.	NPGTB	
THE IONIZATION STRUCTURE OF PLANETARY NEBULAE					
BARRY	DON C.	USC	U. S.	BCGDB	
SIMULTANEOUS OBSERVATIONS OF BW VULPECULAE WITH VOYAGER AND IUE					
BEGELMAN	MITCHELL C.	COLORADO-JILA	U. S.	QSGMB	ARCHIVAL
STUDIES OF GLOBAL H II REGIONS IN SEYFERT GALAXIES					
BLAIR	WILLIAM P.	CFA - SAO	U. S.	NSGWB	
UV SPECTRA OF AN O-RICH SUPERNOVA REMNANT IN THE SMC					
BLAIR	WILLIAM P.	CFA - SAO	U. S.	NEGWB	
UV SPECTRA OF EVOLVED MAGELLANIC CLOUD SUPERNOVA REMNANTS					
BLAIR	WILLIAM P.	CFA - SAO	U. S.	CVGWB	
ACCRETION DISK PARAMETERS IN CATACLYSMIC VARIABLES					
BOGGESS	ALBERT	GSFC	U. S.	QSGAB	
UV OBSERVATIONS OF SEYFERT GALAXIES					
BOHM	KARL-HEINZ	WASH.	U. S.	HHGKB	
FORMATION OF UV CONTINUA AND FAINT LINES IN HERBIG-HARO OBJECTS					
BOHM-VITENSE	ERIKA	WASH.	U. S.	DCGEB	
VARIATIONS OF POP. II CEPHEID UV ENERGY DISTRIBUTIONS					
BOHM-VITENSE	ERIKA	WASH.	U. S.	IEGEB	
INTERSTELLAR GAS AND DUST ABSORPTIONS NEAR NGC 6530					
BOHM-VITENSE	ERIKA	WASH.	U. S.	CBGEB	
DYNAMICAL MASSES FOR POPULATION I AND POPULATION II CEPHEIDS					
BOHM-VITENSE	ERIKA	WASH.	U. S.	AFGEB	
ULTRAVIOLET SPECTRA OF GAMMA BOO STARS					

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NAME	INSTITUTION	COUNTRY	PROG ID	OBSERVATIONAL/ ARCHIVAL
TITLE				
BOHM-VITENSE ERIKA	WASH.	U. S.	CSGEB	
G AND EARLY K GIANT UV CONTINUA AND EARLY EMISSION LINE INTENSITIES				
BOHM-VITENSE ERIKA	WASH.	U. S.	LGGEB	
SEARCH FOR WHITE DWARF COMPANIONS OF BA STARS EVOLVING UP THE GIANT BRANCH				
BOND HOWARD E.	LOUISIANA ST.	U. S.	NPGHB	
ULTRAVIOLET OBSERVATIONS OF CLOSE-BINARY AND PULSATING NUCLEI OF PLANETARY NEBULAE				
BOPP BERNARD W.	TOLEDO	U. S.	IBGBB	
INTERACTING F + BE BINARY STARS				
BOWYER C. STUART	CAL BERKELEY	U. S.	IGGCB	
DISTRIBUTION OF THE NEUTRAL INTERSTELLAR HYDROGEN TOWARD THE SOUTH GALACTIC POLE				
BOWYER C. STUART	CAL BERKELEY	U. S.	BLGCB	
SIMULTANEOUS MULTI-WAVELENGTH OBSERVATIONS OF HIGHLY VARIABLE BL LACS				
BROWN DOUGLAS N.	WASH.	U. S.	HWGDB	ARCHIVAL
HELIUM-WEAK PHOTOSPHERES AND STELLAR WINDS. II: ANALYSIS OF ARCHIVAL DATA				
BROWN DOUGLAS N.	WASH.	U. S.	HSGDB	
HELIUM-WEAK PHOTOSPHERES AND STELLAR WINDS				
BRUGEL EDWARD W.	COLORADO-LASP	U. S.	MFGEB	
THE MASS FUNCTION IN LARGE MAGELLANIC CLOUD ASSOCIATIONS				
BRUHWEILER FREDERICK C.	CATHOLIC UNIV	U. S.	WDGFB	
LEVITATION AND MASS LOSS IN HOT DA WHITE DWARFS				
BRUHWEILER FREDERICK C.	CATHOLIC UNIV	U. S.	GHGFB	ARCHIVAL
AN ULTRAVIOLET SEARCH FOR HIGH VELOCITY GAS TOWARD THE SOUTH GALACTIC POLE				
BRUHWEILER FREDERICK C.	CATHOLIC UNIV	U. S.	IGGFB	
PLANETARY NEBULAE AND SHARP-LINED DISPLACED FEATURES IN WHITE DWARFS				
BRUHWEILER FREDERICK C.	CATHOLIC UNIV	U. S.	MLGFB	
VARIABLE MASS LOSS IN HOT SUBLUMINOUS STARS				
CALDWELL JOHN J.	STONY BROOK	U. S.	SUGJC	
IUE SOLAR SYSTEMS OBSERVATIONS I. URANUS & NEPTUNE BELOW 2000 A				
CARNEY BRUCE W.	N. CAROLINA	U. S.	HCGBC	
ULTRAVIOLET OBSERVATIONS OF BLUE STRAGGLERS AND HALO K DWARFS				

NASA APPROVED IUE PROGRAMS FOR THE SEVENTH YEAR

NAME	INSTITUTION	COUNTRY	PROG ID	OBSERVATIONAL/ ARCHIVAL
TITLE				
CASSINELLI JOSEPH P.	WISCONSIN	U. S.	MLGJC	
THE DEPENDENCE OF WIND PROPERTIES ON LUMINOSITY CLASS FOR B STARS IN NGC 3293				
CHAPMAN ROBERT D.	GSFC	U. S.	LGGRC	ARCHIVAL
EMPIRICAL MODEL OF THE ATMOSPHERE OF THE K SUPERGIANT IN ZETA AURIGAE				
CHAPMAN ROBERT D.	GSFC	U. S.	VVGRC	
PHYSICS OF EPSILON AURIGAE: OBSERVATIONS OF EGRESS AND POST-ECLIPSE				
COHEN MARTIN	NASA/AMES	U. S.	NJGMC	
ULTRAVIOLET SPECTROSCOPY OF AN OPTICAL & RADIO JET ASSOCIATED WITH A YOUNG STAR				
COHEN ROSS D.	CAL SAN DIEGO	U. S.	QSGRC	
PHYSICAL CONDITIONS IN NARROW-LINE RADIO GALAXIES AND SEYFERT 2 GALAXIES				
CORDOVA FRANCE A	LOS ALAMOS	U. S.	CVGFC	
IUE OBSERVATIONS OF HIGH-INCLINATION CLOSE BINARY SYSTEMS				
COWLEY ANNE P.	ARIZONA ST.	U. S.	EGGAC	
THE STELLAR CONTENT OF M31 GLOBULAR CLUSTERS				
DAWSON DENNIS W.	F & M COLLEGE	U. S.	LGGDD	
THE ENVELOPES OF RV TAURI AND SEMI-REG DWARF VARIABLES DURING THE RISE TO MAXIMUM LIGHT				
DRILLING JOHN S.	LOUISIANA ST.	U. S.	HSGJD	
ULTAVIOLET SPECTROSCOPY OF SUBLUMINOUS O STARS				
DUFOUR REGINALD J.	RICE	U. S.	NDGRD	
HIGH DISPERSION IUE OBSERVATIONS OF MATERIAL EJECTED BY ETA CARINAE				
DUFOUR REGINALD J.	RICE	U. S.	NEGRD	
HIGH DISPERSION IUE OBSERVATIONS OF METAL-POOR EXTRAGALACTIC H II REGIONS -- III				
DUPREE ANDREA K.	CFA - SAO	U. S.	CCGAD	
CHROMOSPHERES IN METAL DEFICIENT GIANT STARS				
DUPREE ANDREA K.	CFA - SAO	U. S.	GCGAD	
CHROMOSPHERES OF RED GIANTS IN GLOBULAR CLUSTERS				
DUPREE ANDREA K.	CFA - SAO	U. S.	CSGAD	
INTENSIVE MULTI-FREQUENCY OBSERVATIONS OF ALPHA ORIONIS				
DURRANCE SAMUEL T.	JOHNS HOPKINS	U. S.	SUGSD	
VARIABILITY TIME SCALE OF H LYMAN ALPHA FROM URANUS				

NASA APPROVED IUE PROGRAMS FOR THE SEVENTH YEAR

NAME	INSTITUTION	COUNTRY	PROG ID	OBSERVATIONAL/ ARCHIVAL
TITLE				
EATON JOEL A	INDIANA	U. S.	CBGJE	
NON-RADIATIVE HEATING IN STELLAR ATMOSPHERES: A-TYPE W UMA BINARIES				
EBBETS DENNIS C.	ST SC. I.	U. S	EGGDE	
THE STELLAR POPULATION OF STAR-BURST GALACTIC NUCLEI				
EVANS NANCY REMAGE	CSC	U. S.	CBGNE	
FREQUENCY OF MULTIPLE SYSTEMS AMONG CEPHEID BINARIES: IMPLICATIONS FOR STAR FORMATION				
EVANS NANCY REMAGE	CSC	U. S.	DCGNE	
THE MASS OF THE HIGH LUMINOSITY CEPHEID T MONOCEROTIS				
FABER SANDRA M.	CAL S CRUZ	U. S.	EGGSF	
METALLICITY AND THE LEVEL OF THE UV RISING BRANCH IN ELLIPTICAL GALAXIES				
FEIBELMAN WALTER A	GSFC	U. S.	HSGWF	
HIGH DISPERSION OBSERVATIONS OF THE CENTRAL STAR OF NGC 7293				
FEIBELMAN WALTER A.	GSFC	U. S.	NPGWF	
OBSERVATIONS OF BIPOLAR AND/OR PROTOPLANETARY NEBULAE				
FEIBELMAN WALTER A.	GSFC	U. S.	NAGWF	ARCHIVAL
ATLAS OF LOW AND HIGH DISPERSION IUE SPECTROGRAMS OF PLANETARY NEBULAE AND RELATED OBJECTS				
FEKEL FRANCIS C., JR	VANDERBILT	U. S.	CCGFF	
DISPERSION IN THE ROTATION-ACTIVITY RELATIONS				
FELDMAN PAUL D	JOHNS HOPKINS	U. S.	SCGPF	
OBSERVATIONS OF COMETS WITH THE INTERNATIONAL ULTRAVIOLET EXPLORER				
FERLAND GARY J.	KENTUCKY	U. S.	RGGGF	
ULTRAVIOLET AND OPTICAL OBSERVATIONS OF NARROW LINE RADIO GALAXIES				
FESEN ROBERT A.	COLORADO-LASP	U. S.	NSGRF	
A STUDY OF GRAIN DESTRUCTION IN THE CYGNUS LOOP SUPERNOVA REMNANT				
FESEN ROBERT A.	COLORADO-LASP	U. S.	IGGRF	
UV ABSORPTION LINE INVEST. IN THE LINE-OF-SIGHT DIRECTION TO THE SNR PUPPIS A				
FESEN ROBERT A.	COLORADO-LASP	U. S.	NEGRF	
UV EMISSION LINE STUDY OF THE ELEMENTAL ABUNDANCES IN THE SUPERNOVA REMNANT PUPPIS A				
FESEN ROBERT A.	COLORADO-LASP	U. S.	IMGRF	
IDENTIFICATION OF EXTREMELY EVOLVED SUPERNOVA REMNANTS				

NASA APPROVED IUE PROGRAMS FOR THE SEVENTH YEAR

NAME	INSTITUTION	COUNTRY	PROG ID	OBSERVATIONAL/ ARCHIVAL
TITLE				
GARMANY	CATHARINE D	COLORADO	U. S.	WRGCG
CONTINUUM SHAPES OF WOLF-RAYET STARS				
GARMANY	CATHARINE D.	COLORADO	U. S.	IEGCG
INTERSTELLAR REDDENING IN THE SMALL MAGELLANIC CLOUD				
GIAMPAPA	MARK S.	NOAO - NSO	U. S	CCGMG
THE TRANSITION REGIONS OF X-RAY EMITTING MAIN-SEQUENCE A STARS				
GIBSON	DAVID M.	NEW MEX TECH	U. S.	CCGDG ARCHIVAL
FLARE-LIKE ACTIVITY IN SINGLE G, K, AND M STARS				
GLASSGOLD	A. E.	NEW YORK U.	U. S.	BLGAG
MULTIFREQUENCY OBSERVATIONS OF BL LAC OBJECTS AND VIOLENTLY VARIABLE QUASARS				
GLASSGOLD	A. E.	NEW YORK U.	U. S.	QSGAG
HIGH SIGNAL TO NOISE STUDIES OF INTERMEDIATE REDSHIFT QUASARS				
GRADY	CAROL A.	CSC	U. S.	HSGCG
ULTRAVIOLET CONTINUA OF B AND BE STARS				
GREEN	RICHARD F.	NOAO - KPNO	U. S.	QSGRG
QUASARS AT REDSHIFT 1				
GUINAN	EDWARD F.	VILLANOVA	U. S.	CBGEG
VERTICAL ATMOSPHERIC STRUCTURE OF THE K-DWARF COMPONENT OF THE ECLIPSING BINARY V471 TAURI				
HAISCH	BERNHARD M.	LOCKHEED	U. S.	FSGBH
COORDINATED OBSERVATIONS OF STELLAR FLARES				
HALLAM	KENNETH L.	GSFC	U. S.	CCGKH ARCHIVAL
SURVEY OF CHROMOSPHERES IN F-G-K DWARFS				
HARPER	DOYAL A.	CHICAGO	U. S.	CMGDH
UV OBSERVATIONS OF VEGA SYSTEM MATERIAL				
HARRINGTON	J. PATRICK	MARYLAND	U. S.	NPGJH
EFFECTS OF STELLAR WINDS ON PLANETARY NEBULAE				
HARTMANN	LEE W	CFA - SAO	U. S.	HYGLH
HIGH-VELOCITY WINDS FROM HYBRID STARS				
HECKATHORN	JOY NICHOLS	CSC	U. S.	IGGJH
INVESTIGATION OF HIGH-VELOCITY INTERSTELLAR GAS TOWARD HD 50896				

NASA APPROVED IUE PROGRAMS FOR THE SEVENTH YEAR

NAME	INSTITUTION	COUNTRY	PROG ID	OBSERVATIONAL/ ARCHIVAL
TITLE				
HENRY RICHARD C.	JOHNS HOPKINS	U. S.	IMGRH	
NEUTRAL HYDROGEN IN THE LOCAL INTERSTELLAR MEDIUM				
HOBBS LEWIS M.	CHICAGO-YRKS	U. S.	GHGLH	
THE DISTRIBUTION OF INTERSTELLAR GAS IN THE GALACTIC HALO				
HOLBERG JAY B.	ARIZONA - LPL	U. S.	SSGJH	
IUE OBSERVATIONS OF SATURN'S RINGS				
HOLBERG JAY B.	ARIZONA - LPL	U. S.	WDGJH	
WHITE DWARF LYMAN ALPHA PROFILES				
HOLLIS JAN M	GSFC	U. S.	SCGJH	
ULTRAVIOLET ABSORPTION STUDIES TOWARD COMET COMAE				
HU ESTHER M.	ST SC. I.	U. S.	EGGEH	
UV SPECTROSCOPY OF EMISSION LINE GAS IN THE CENTRAL GALAXIES OF X-RAY LUMINOUS CLUSTERS				
HUCHRA JOHN P.	CFA - SAO	U. S.	EGGJH	
DISTANT BLUE GALAXIES				
HUENEMOERDER DAVID P.	PENN ST.	U. S.	RSGDH	
INVESTIGATION OF GAS STREAMS IN THE RS CVN BINARIES SZ PISCIUM AND RT LACERTAE				
HUTCHINGS JOHN B.	DAO	CANADA	XBGJH	
PHASE RESOLVED SPECTRA OF LMC X-1				
IMHOFF CATHERINE L.	CSC	U. S.	CSGCI	
ULTRAVIOLET SPECTRA OF YOUNG STARS RELEVANT TO EARTH'S EARLY ATMOSPHERE				
IMHOFF CATHERINE L	CSC	U. S.	CCGCI	ARCHIVAL
AN ARCHIVAL INVESTIGATION OF THE CHROMOSPHERES OF THE T TAURI STARS				
JENKINS EDWARD B.	PRINCETON	U. S.	EHGEJ	
LYMAN-ALPHA HALOS OF GALAXIES				
JOHNSON HOLLIS R.	INDIANA	U. S.	CSGHJ	
STUDIES OF THE ULTRAVIOLET SPECTRA OF CARBON STARS				
JUGAKU JUN	TOKYO	JAPAN	XBGJJ	
SELECTED X-RAY BINARIES AT X-RAY OUTBURSTS OR HIGH STATES				
KAFATOS MINAS	GEORGE MASON	U. S.	QSGMK	ARCHIVAL
EUV LINES OF HIGH REDSHIFT QSO'S AND THE FUTURE OF EUV ASTRONOMY				

NASA APPROVED IUE PROGRAMS FOR THE SEVENTH YEAR

NAME	INSTITUTION	COUNTRY	PROG ID	OBSERVATIONAL/ ARCHIVAL
TITLE				
KIRSHNER ROBERT P	MICHIGAN	U. S	ORGRK	
OB ASSOCIATION CONTAMINATION IN SPECTRA OF SN EVANS 1983 IN M 83				
KONDO YOJI	GSFC	U. S.	BLGYK	
COORDINATED OBSERVATIONS OF X-RAY BRIGHT BL LACERTAE OBJECTS				
LAMB SUSAN A.	ILLINOIS	U. S.	EGGSL	
A COMPARISON OF STAR FORMATION CHARACTERISTICS IN DIFFERENT TYPES OF IRREGULAR GALAXIES				
LANG KENNETH R.	TUFTS UNIV.	U. S.	FSGKL	
IUE AND VLA OBSERVATIONS OF THE NEARBY DWARF M FLARE STARS YY GEM, YZ CMI & AD LEO				
LIEBERT JAMES W.	ARIZONA	U. S.	WDGJL	
A SEARCH FOR HOT DB WHITE DWARFS				
LIEBERT JAMES W.	ARIZONA	U. S.	HEGJL	
A HIGH DISPERSION SPECTRUM OF THE HOT PULSATING WHITE DWARF PG1159-035				
LIEN DAVID J.	MICHIGAN ST.	U. S.	IGGDL	ARCHIVAL
INTERSTELLAR ATOMIC AND MOLECULAR OBSERVATIONS OF STARS TOWARD REFLECTION NEBULAE				
LINSKY JEFFREY L.	COLORADO-JILA	U. S.	MLGJL	ARCHIVAL
DETAILED STUDY OF THE ALPHA ORIONIS WIND BY THE ANALYSIS OF FE II PROFILES				
LINSKY JEFFREY L.	COLORADO-JILA	U. S.	CCGJL	
DIFFERENCES IN CHROMOSPHERES OF M GIANTS & SUPERGIANTS AS A FUNCTION OF THE DUST/GAS RATIO				
LINSKY JEFFREY L.	COLORADO-JILA	U. S.	AFGJL	
COMPLETION OF F DWARF ACTIVITY RELATIONS STUDY				
LINSKY JEFFREY L.	COLORADO-JILA	U. S.	RSGJL	
SIZE AND PHYSICAL PROPERTIES OF ACTIVE REGIONS IN RS CVN SYSTEMS				
LINSKY JEFFREY L.	COLORADO-JILA	U. S.	CSGJL	
PROPERTIES OF STELLAR WINDS: FE II, C II, AND VARIABILITY				
LINSKY JEFFREY L.	COLORADO-JILA	U. S.	LGGJL	
ATMOSPHERIC MODELING OF COOL GIANT AND SUPERGIANT STARS				
LINSKY JEFFREY L.	COLORADO-JILA	U. S.	TTGJL	
HIGH DISPERSION LINE PROFILE STUDIES OF TW HYA AND OTHER PRE-MAIN SEQUENCE STARS				
LINSKY JEFFREY L.	COLORADO-JILA	U. S.	PMGJL	
BEYOND THE 1-1/2 CHROMOSPHERIC SCALING LAW				

NASA APPROVED IUE PROGRAMS FOR THE SEVENTH YEAR

NAME	INSTITUTION	COUNTRY	PROG ID	OBSERVATIONAL/ ARCHIVAL
TITLE				
LINSKY JEFFREY L.	COLORADO-JILA	U. S.	HYGJL	
HIGH DISPERSION WAVELENGTH-CALIBRATED SPECTRA OF HYBRID-CHROMOSPHERE STARS				
LINSKY JEFFREY L.	COLORADO-JILA	U. S.	LDGJL	
ULTRAVIOLET STUDY OF THE CHAMAELEON T-ASSOCIATION				
LITTLE-MARENIN IRENE	WELLESLEY	U. S.	LGGIL	
SEARCH FOR TECHNETIUM IN BARIUM STARS				
LUTZ JULIE H.	WASH. ST.	U. S.	NPGJL	
IUE STUDIES OF INFRARED D-TYPE SYMBIOTIC STARS/PLANETARY NEBULAE				
MALKAN MATTHEW A.	ARIZONA	U. S.	QSGMM	
COORDINATED IUE AND GROUND-BASED OBSERVATIONS OF BRIGHT VARIABLE SEYFERT 1 GALAXIES				
MARAN STEPHEN P.	GSFC	U. S.	NPGSM	
PLANETARY NEBULAE & THEIR CENTRAL STARS IN THE MAGELLANIC CLOUDS				
MARGON BRUCE	WASH.	U. S.	HSGBM	
THE NATURE OF THE UV EXCESS OBJECTS WITH MISSING H-ALPHA				
MASSEY PHILIP L.	NOAO - KPNO	U. S.	MLGPM	
STELLAR WINDS IN THE HOT STARS OF NEARBY GALAXIES				
MCCLUSKEY GEORGE E.	LEHIGH	U. S.	IBGGM	ARCHIVAL
ACCRETIONAL HEATING AND GAS FLOW IN INTERACTING BINARIES				
MICHALITSIANOS ANDREW G.	GSFC	U. S.	NJGAM	
TEMPORAL VARIABILITY: UV EMISSION FROM THE R AQUARII JET				
MILLER H. RICHARD	GEORGIA ST.	U. S.	QSGHM	ARCHIVAL
ULTRAVIOLET STUDIES OF ACTIVE GALACTIC NUCLEI				
MOOS H. WARREN	JOHNS HOPKINS	U. S.	SPGHM	
STUDY OF ULTRAVIOLET EMISSIONS INDUCED BY THE MAGNETOSPHERES OF SATURN AND URANUS				
MOOS H. WARREN	JOHNS HOPKINS	U. S.	SJGHM	
THE INTERACTION BETWEEN THE JOVIAN ATMOSPHERE AND MAGNETOSPHERE				
MOOS H. WARREN	JOHNS HOPKINS	U. S.	SIGHM	
THE STABILITY OF THE IO TORUS				
NELSON ROBERT M.	JPL	U. S.	SPGRN	
UV SPECTROPHOTOMETRY OF THE GALILEAN SATELLITES, SATURNIAN SATELLITES & SELECTED ASTEROIDS				

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NAME	INSTITUTION	COUNTRY	PROG ID	OBSERVATIONAL/ ARCHIVAL
TITLE				
NOUSEK JOHN A.	PENN ST.	U. S.	WDGJN	
NEWLY DISCOVERED X-RAY WHITE DWARFS: H1501+66 AND H1659+44				
OKE JOHN BEVERLY	CAL TECH	U. S.	QSGJO	
IUE OBSERVATIONS OF VARIABLE TYPE 1 SEYFERT GALAXIES				
OLIVERSEN NANCY A.	CSC	U. S.	ZAGNO	
THE GEOMETRIC STRUCTURE OF THE SYMBIOTIC STARS EG ANDROMEDAE AND AX PERSEI				
PARSONS SIDNEY B	CSC	U. S.	VVGSP	
ECLIPSE COVERAGE OF THE G SUPERGIANT 22 VUL				
PETERS GERALDINE J.	USC	U. S.	IBGGP	
IUE & VOYAGER OBSERVATIONS OF THE EARLY TYPE CONTACT SYSTEMS SX AUR, BF AUR AND SV CEN				
PHILIP A. G. DAVIS	WESLEYAN UNIV	U. S.	HSGAP	
ULTRAVIOLET OBSERVATIONS OF "HIGH MASS" FIELD HORIZONTAL-BRANCH A-STARS				
PLAVEC MIREK J.	CAL LA	U. S.	FEGMP	
TWO IRON STARS				
PLAVEC MIREK J.	CAL LA	U. S.	CBGMP	
CIRCUMSTELLAR EMISSION REGIONS IN ALGOLS				
PLAVEC MIREK J.	CAL LA	U. S.	IBGMP	
INTERACTING BINARIES WITH THICK CIRCUMSTELLAR SHELLS				
POLIDAN RONALD S.	USC - ARIZONA	U. S.	CVGRP	
IUE AND VOYAGER OBSERVATIONS OF SS CYGNI IN OUTBURST				
POLIDAN RONALD S.	USC - ARIZONA	U. S.	CBGRP	
A STUDY OF LONG TERM, PERIODIC LIGHT VARIATIONS IN ALGOL BINARIES				
PTAK ROGER L.	BOWLING GREEN	U. S.	QSGRP	
TIME VARIABILITY OF EMISSION LINE PROFILES IN SEYFERT 1 GALAXIES				
RAYMOND JOHN C.	CFA - SAO	U. S.	NSGJR	
THE CYGNUS LOOP				
RAYMOND JOHN C.	CFA - SAO	U. S.	CVGJR	
P CYGNI PROFILE VARIATIONS IN DWARF NOVAE				
RAYMOND JOHN C.	CFA - SAO	U. S.	IGGJR	
SOFT X-RAY IONIZATION OF INTERSTELLAR GAS				

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NAME	INSTITUTION	COUNTRY	PROG ID	OBSERVATIONAL/ ARCHIVAL
TITLE				
RAYMOND JOHN C.	CFA - SAO	U. S.	XBGJR	
SPECTRAL VARATIONS IN AM HER STARS				
RAYMOND JOHN C.	CFA - SAO	U. S.	WDGJR	
THE MASS OF FEIGE 24				
ROMANISHIN WILLIAM	GSFC	U. S.	EGGWR	
UV SPECTROPHOTOMETRY OF VERY LUMINOUS NORMAL SPIRAL GALAXIES				
SAVAGE BLAIR D.	WISCONSIN	U. S.	MLGBS	
A STUDY OF MAIN SEQUENCE B STARS WITH STRONG WINDS				
SAVAGE BLAIR D.	WISCONSIN	U. S.	IEGBS	
A STUDY OF THE NATURE OF DUST IN THE OPEN CLUSTER TRUMPLER 37				
SAVAGE BLAIR D.	WISCONSIN	U. S.	HSGBS	ARCHIVAL
A STUDY OF THE MOST LUMINOUS SUPERGIANTS IN THE LMC				
SAVAGE BLAIR D.	WISCONSIN	U. S.	GHGBS	
THE GALACTIC DISTRIBUTION OF HALO GAS				
SAVAGE BLAIR D.	WISCONSIN	U. S.	IGGBS	ARCHIVAL
A STUDY OF INTERSTELLAR GAS KINEMATICS IN THE LARGE MAGELLANIC CLOUD				
SCHWARTZ RICHARD D.	MISSOURI-ST.L	U. S.	HHGRS	
LOW EXCITATION HERBIG-HARO OBJECTS AND INTERSTELLAR EXTINCTION				
SHAW J. SCOTT	GEORGIA	U. S.	VVGJS	
VV CEPHEI TYPE STARS				
SHIPMAN HARRY L.	DELAWARE	U. S.	WDGHS	
SPECTROSCOPY OF MAGNETIC WHITE DWARF STARS INCLUDING THE UNIQUE EMISSION-LINE OBJECT GD356				
SHULL J. MICHAEL	COLORADO-LASP	U. S.	HHGJS	
IUE OBSERVATIONS OF HERBIG-HARO OBJECTS				
SHULL J. MICHAEL	COLORADO-LASP	U. S.	IEGJS	ARCHIVAL
INTERSTELLAR STUDIES WITH IUE ARCHIVES				
SHULL J. MICHAEL	COLORADO LASP	U. S.	IMGJS	ARCHIVAL
STELLAR WIND-SHOCKED H II REGIONS				
SHULL J. MICHAEL	COLORADO-LASP	U. S.	IGGJS	
IUE INTERSTELLAR OBSERVATIONS				

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TITLE				
SIMON THEODORE	HAWAII	U. S.	LEGTS	
CHROMOSPHERES AND LIGHT ELEMENT ABUNDANCES				
SIMON THEODORE	HAWAII	U. S	CCGTS	
THE EVOLUTION OF STELLAR CHROMOSPHERES				
SIMON THEODORE	HAWAII	U. S.	HHGTS	
IUE OBSERVATIONS OF FLOWS AND JETS IN HH OBJECTS				
SIMON THEODORE	HAWAII	U. S.	LGGTS	
ACTIVE REGIONS IN YELLOW GIANT STARS				
SITKO MICHAEL L.	MINNESOTA	U. S.	CMGMS	
ULTRAVIOLET STUDIES OF HD 44179 AND HD 97048				
SITKO MICHAEL L.	MINNESOTA	U. S.	XQGMS	
MULTIFREQUENCY OBSERVATIONS OF TWO VARIABLE X-RAY EMITTING QSOS				
SKUMANICH ANDREW	HAO-NCAR	U. S.	CCGAS	
PROPERTIES OF A RAPIDLY ROTATING DME STAR & OF H-ALPHA ANOMALOUS LOW-MASS STARS				
SMITH GRAEME	CFA - SAO	U. S.	CCGGS	
AN ULTRAVIOLET STUDY OF THE CHROMOSPHERES OF MG7 GIANTS				
SNEDEN CHRISTOPHER	TEXAS	U. S.	LEGCS	
BERYLLIUM IN PECULIAR G-K GIANT STARS				
SNOW THEODORE P.,JR	COLORADO-LASP	U. S.	CMGTS	ARCHIVAL
COLUMN DENSITIES IN THE CIRCUMSTELLAR SHELLS OF B AND BE STARS				
SNOW THEODORE P.,JR	COLORADO-LASP	U. S.	IMGTS	
INTERSTELLAR LINES AND ULTRAVIOLET EXTINCTION IN DARK CLOUDS				
SODERBLOM DAVID R.	CFA - SAO	U. S.	LDGDS	
CHROMOSPHERIC EMISSION OF LATE-TYPE DWARFS IN VISUAL BINARIES				
SODERBLOM DAVID R.	CFA - SAO	U. S.	CCGDS	
CHROMOSPHERES & TRANSITION REGIONS OF STARS IN THE URSA MAJOR GROUP				
SONNEBORN GEORGE	CSC	U. S.	HSGGS	ARCHIVAL
ULTRAVIOLET SPECTRAL CLASSIFICATION OF B STARS USING IUE ARCHIVE DATA				
SONNEBORN GEORGE	CSC	U. S.	OBGGS	
ROTATIONAL BROADENING OF ULTRAVIOLET PHOTOSPHERIC LINES IN LATER-TYPE B STARS				

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TITLE				
STARRFIELD SUMNER	ARIZONA ST.	U. S.	CVGSS	
ULTRAVIOLET OBSERVATIONS OF GALACTIC NOVAE IN OUTBURST				
STEIMAN-CAMERON THOMAS Y	CAL TECH-MT.W	U. S.	CSGTS	
CHROMOSPHERIC ACTIVITY, HO STRENGTH AND SPECTRAL TYPES IN M GIANTS				
STONER RONALD E	BOWLING GREEN	U. S.	QSGRS	ARCHIVAL
TESTS OF A MODEL FOR SEYFERT 1 EMISSION PROFILES				
SZKODY PAULA	WASH.	U. S.	IBGPS	
DISK DEVELOPEMENT IN U GEM FROM ONE OUTBURST TO THE NEXT				
THUAN TRINH X.	VIRGINIA	U. S.	EGGTT	
ULTRAVIOLET STUDIES OF NUCLEAR ACTIVITY IN NORMAL GALAXIES				
THUAN TRINH X.	VIRGINIA	U. S.	HCGTT	ARCHIVAL
STELLAR POPULATIONS IN GALAXIES WITH ACTIVE STAR FORMATION				
TORRES ANA V	COLORADO	U. S.	HSGAT	
CONTINUUM ENERGY DISTRIBUTION OF O-TYPE STARS				
TURNSHEK DAVID A.	PITTSBURGH	U. S.	QSGDT	
BROAD ABSORPTION LINE QSOS				
UNDERHILL ANNE B.	GSFC	U. S.	WRGAU	
A HIGH-RESOLUTION SPECTROPHOTOMETRIC STUDY OF THE WR BINARY SYSTEM V444 CYGNI				
WAITE J H	NASA/MSFC	U. S.	MGGJW	
MG+ OBSERVATIONS OF EARTH				
WALBORN NOLAN R.	GSFC	U. S.	OBGNW	ARCHIVAL
ULTRAVIOLET SPECTRAL MORPHOLOGY OF THE O STARS				
WALDRON WAYNE L.	A. R. CORP.	U. S.	HSGWW	ARCHIVAL
VARIABLILTY OF ULTRAVIOLET LINE RATIOS IN EARLY TYPE STARS				
WALTER FREDERICK M.	COLORADO-JILA	U. S.	RSGFW	
VARIABLE MGII ASYMMETRIES IN FK COMAE BERENICES				
WEGNER GARY A.	DARTMOUTH	U. S.	WDGGW	
ULTRAVIOLET ABSORPTIONS IN THE SPECTRA OF DA WHITE DWARFS				
WESEMAEL FRANCOIS	MONTREAL	CANADA	HSGFW	
LOW-RESOLUTION ULTRAVIOLET OBSERVATIONS OF HOT B SUBDWARFS				

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NAME	INSTITUTION	COUNTRY	PROG ID	OBSERVATIONAL/ ARCHIVAL
TITLE				
WESEMAEL FRANCOIS	MONTREAL	CANADA	WDGFW	
ULTRAVIOLET OBSERVATIONS OF THE PULSATING DA WHITE DWARF (ZZ CETI) STARS				
WITT ADOLF N.	TOLEDO	U. S.	IEGAW	
FAR-UV EXTINCTION AND THE SIZE DISTRIBUTION OF INTERSTELLAR GRAINS				
WOODWARD CHARLES E.	ROCHESTER	U. S.	IEGCW	ARCHIVAL
HOT DUST AND THE 3.3 MICRON FEATURE; ARE 10A GRAINS THE SOLUTION ?				
WU CHI-CHAO	CSC	U. S.	MLGCW	
SHORT TIME VARIATIONS IN THE MASS-LOSS RATE OF EARLY TYPE STARS				
WU CHI-CHAO	CSC	U. S.	CVGCW	
TARGET OF OPPORTUNITY OBSERVATIONS OF NOVAE AND X-RAY NOVAE				
YORK DONALD G.	CHICAGO	U. S.	IGGDY	
DISTANCES OF 21CM HIGH VELOCITY (OORT) CLOUDS				
YORK DONALD G.	CHICAGO	U. S.	GHGDY	
VERY LOW H I COLUMN DENSITIES IN THE HALO				
YORK DONALD G.	CHICAGO	U. S.	EGGDY	
HIGH RESOLUTION UV SPECTRA OF NGC 5236 (=M 83)				

SWP and LWR Linearity Error Report *

N. A. Oliversen

Introduction

The SWP and LWR cameras both suffer from non-linearities (Bohlin, et al., 1980). Examples of these linearity errors are shown in this report, for a variety of under and over-exposures. Their stability with time is discussed. Finally, sample linearity errors for spectra obtained with moderate to high backgrounds are also shown. For a discussion of the LWP linearity errors see the report by Hathaway (1982). *

Observation and Data Analysis Technique

HD 60753, a sixth magnitude B3 IV star, is the standard star used for linearity studies. Figure 1 is a plot of the Net Flux Numbers for typical SWP and LWR trailed spectra of HD 60753. In order to obtain the best signal-to-noise, the spectra for this study were all trailed. For each image of a given camera and percent exposure level, the trail rates were duplicated exactly. The spacecraft attitude is held by use of the gyros alone during the trailing procedure. If necessary, several minutes prior to the start of an exposure is spent in monitoring and taking out the thermal drifts by trimming the gyros. This is done to prevent drifting of the star and loss of signal during the exposure.

To compare a test image (typically a non-optimum exposure) with a standard 100% exposure level image, the test image was divided by a reference image. For each flux ratio the following steps were followed:

(1) The fluxes were generated for each image from the standard ESLO file provided by IUE SIPS. Due to an error in the SWP Intensity Transfer Function (ITF), images processed at GSFC prior to July 7, 1979 may contain non-linearities (Holm et al., 1982). For this report, any images affected by this problem have been reprocessed using the corrected software.

(2) For each flux ratio, the numerator spectra were interpolated to the wavelength of the denominator spectra by use of a spline interpolation routine.

(3) The test spectra were then divided by an 100% reference spectrum. Where appropriate two test spectra were averaged prior to the ratioing.

(4) Finally, each ratio was smoothed with a 5 point median filter in order to eliminate large spikes and also smoothed with an 11 point boxcar filter.

* Reprinted from NASA IUE Newsletter No.23 p31.

(5) To minimize the effects of sensitivity variations (Sonneborn and Schiffer, 1982), generally the spectra used to derive a flux ratio for a given camera were obtained on the same day. The two exceptions to this are figures 5 and 13. However, the LWR and SWP ratios on an individual plot may represent data taken several months apart.

Reproducibility

Figures 2a-c show the ratio of fluxes from pairs of identical, optimally-exposed trailed spectra of HD 60753. Ideally, each ratio should be equal to unity. For each of these three figures, the flux ratios were also averaged over 100 angstrom bandpasses and are listed in Table 1. The binned flux ratios for the SWP show an rms deviation of 3.1% from unity. The LWR flux ratios show a slightly smaller rms deviation of 2.0% from unity.

For a consistency check, the same spectra as were used for figure 1 in the study by Holm (1982), were also used to construct figure 2b. The two figures give similar linearity errors, indicating that the technique used in the two studies was similar. The exact smoothing routines differed slightly between the two studies, but the average errors are similar.

A change in the camera head amplifier temperature (THDA) during the exposure sequence is a possible source of sensitivity errors. As the camera temperature increases the sensitivity decreases at a rate of .5%/degree for the SWP and 1.1%/degree for the LWR (Schiffer, 1982). Changes in the camera temperature therefore, should affect the reproducibility errors. The camera temperature was checked for the exposures used in figures 2a to c. The change in temperature along with the cooresponding relative sensitivity factors are listed in table 2. After correction for temperature induced sensitivity changes, the rms deviation for the SWP is essentially unchanged while the rms deviation for the LWR is reduced slightly to 1.5%.

Sonneborn and Schiffer (1982) report rms errors for individual point source spectra of 3.5% for the SWP spectra and 3.8% for the LWR spectra. The reproducibility for trailed SWP spectra appear to be consistent with the 2 to 3 percent reported by Holm (1982). The reproducibility of the LWR trailed spectra, on the other hand, appears to be better than the reproducibility for point source spectra.

It should be noted that the statistical sample size for this study is very small - only 6 images were used for the estimate of the trailed reproducibility errors. By contrast, Sonneborn and Schiffer's errors are based on a larger sample size. In addition their errors are for point spectra and it is uncertain whether the reproducibility of point source and trailed spectra are comparable.

Linearity Errors for Spectra at a Given Epoch

Figures 3 through 6 illustrate typical linearity errors for a variety of non-optimum exposure levels.

Figure 3 shows the linearity errors for the ratio of spectra of 120%/100% exposure levels. Both the SWP and LWR 120% spectra contain pixels extrapolated beyond the highest level of the ITF. For the SWP exposure, the extrapolated pixels are between about 1240 and 1350 angstroms and for the LWR are between 2550 and 2890 angstroms. The errors on this plot are within the reproducibility error limits (see Figure 2), even though the 120% spectra contain extrapolated pixels.

Figures 4 through 6 show the linearity errors for the ratios of 60%/100%, 40%/100%, and 30%/100% respectively. For the LWR, as the exposure level is reduced, the derived flux is too high relative to the flux obtained with an optimum exposure level (see also Holm (1982) and Hathaway (1983)). For the SWP, the effect is a function of wavelength. At the shortest wavelengths the derived flux is too low relative to an optimum exposure, while at the longest wavelengths the flux is too high.

Stability of Linearity Errors with Time

Figures 6 to 11 show the linearity errors for the 30%/100% flux ratios covering the time period from November 1978 through March 1983. No appropriate SWP spectra were obtained in February or December of 1981. Therefore, figures 7 and 8 contain LWR flux ratios only. The average slope and size of the deviations from unity are all roughly similar to the value obtained for November 1978 (Figure 6). Except for the apparent random noise fluctuations, there does not appear to have been a measurable change in the linearity since November 1978, despite known sensitivity changes (Sonneborn and Schiffer, 1982).

Linearity Errors for Spectra with High Background

Figures 12 and 13 illustrate typical linearity errors for spectra obtained with moderate and high backgrounds. The increased background signal for these images was produced by exposing the camera to a Tungsten Flood Lamp. The average peak 'moderate' background level for the SWP image was 45 DN or 2200 FN, and for the LWR image was 55 DN or 5300 FN. The average peak 'high' background level for the LWR was 95 DN or about 13200 FN.

Non-optimum spectra with high backgrounds suffer from large linearity errors. As can been seen from figure 13, the flux derived from an under-exposed spectra with a high background can be too low by as much as 20% relative to an optimum exposure (with a low background). The background produced by the tungsten flood lamp is assumed to be similar to the background induced by the field particle radiation. This large linearity error can, therefore, be very important for spectra obtained during the US2 shift when the field particle radiation from the Van Allen Belts.

is high.

Table 1
BINNED REPRODUCIBILITY ERRORS

Linearity Flux Ratios

Central Wavelength	Figure 2a FR	Figure 2a Sigma	Figure 2b FR	Figure 2b Sigma	Figure 2c FR	Figure 2c Sigma
1300	.956	.009	.986	.028	.979	.021
1400	.954	.009	.995	.021	.977	.009
1500	.952	.014	.982	.017	.981	.017
1600	.962	.016	.991	.014	.984	.021
1700	.950	.015	.987	.014	.973	.011
1800	.951	.013	.971	.012	.982	.012
1900	.969	.012	.976	.017	.994	.013
SWP	mean dev = .0261		Not corrected for THDA			
	RMS dev = .0305		sensitivity variation.			
2100	.960	.021	1.000	.020	1.010	.017
2200	.978	.016	.988	.013	.986	.016
2300	1.008	.018	.990	.015	.989	.013
2400	1.001	.022	.968	.016	.995	.011
2500	.995	.012	.971	.012	.981	.023
2600	.983	.009	.967	.012	.977	.011
2700	.976	.009	.990	.012	.977	.009
2800	.966	.009	.991	.010	.996	.013
2900	.971	.008	.994	.012	.999	.016
LWR	mean dev = .0157		Not corrected for THDA			
	RMS dev = .0196		sensitivity variation.			

* Flux Ratios (FR) are binned into 100 angstrom bandpasses

Figure 2a: SWP 16582 / SWP 16587
LWR 12818 / LWR 12823

Figure 2b: SWP 14604 / LWR 14608
LWR 12117 / LWR 12123

Figure 2c: SWP 18057 / SWP 18062
LWR 14187 / LWR 14191

Table 2
Camera Temperature Changes and Sensitivity Ratios

	Delta Temperature (Numerator - Denominator)			Relative Sensitivity Factors(%)		
Figure	2a	2b	2c	2a	2b	2c
SWP	.62	-.67	-.34	-.31	+.34	+.17
LWR	-1.35	-.34	-1.30	+1.49	+.37	+1.43

* Relative Sensitivity Factors = the percent of sensitivity change between the first image and the last image taken in the sequence.

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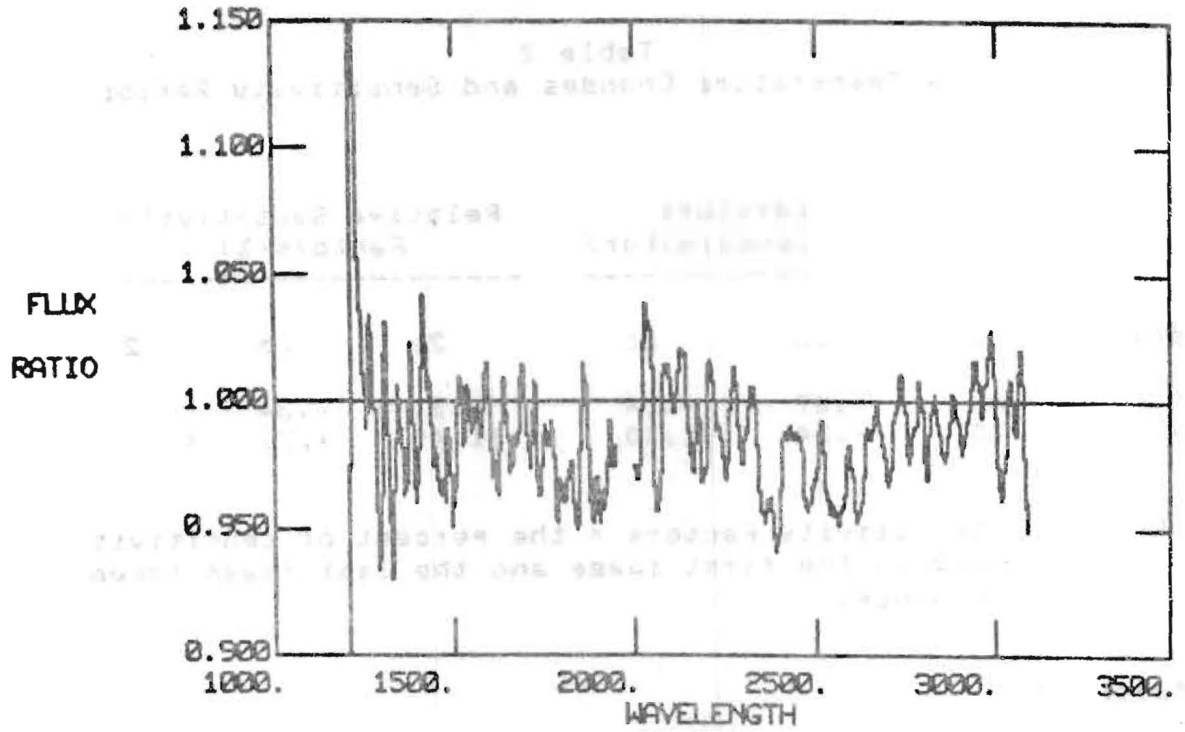

Figure 2b. Reproducibility - Fluxes from 100% / 100%
SWP 14604 / SWP 14608 (July, 1981)
LWR 12117 / LWR 12123 (Dec., 1981)

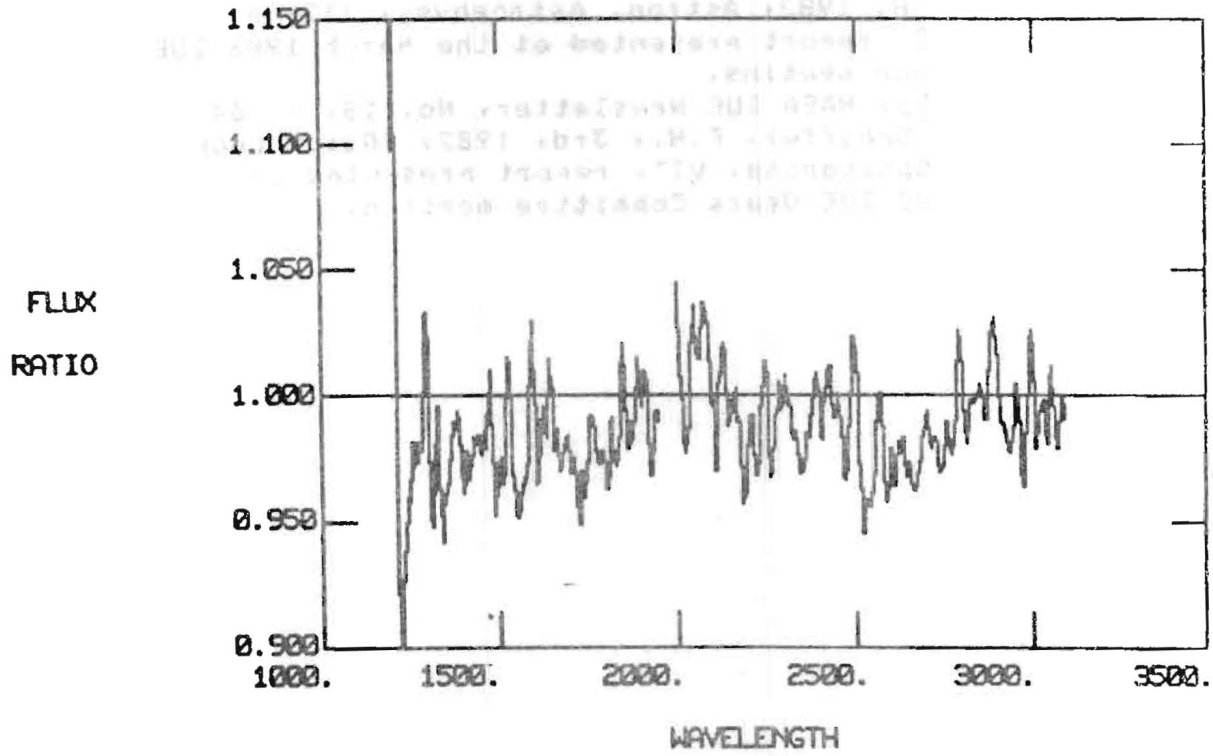

Figure 2c. Reproducibility in September 1982
SWP 18057 / SWP 18062
LWR 14187 / LWR 14191

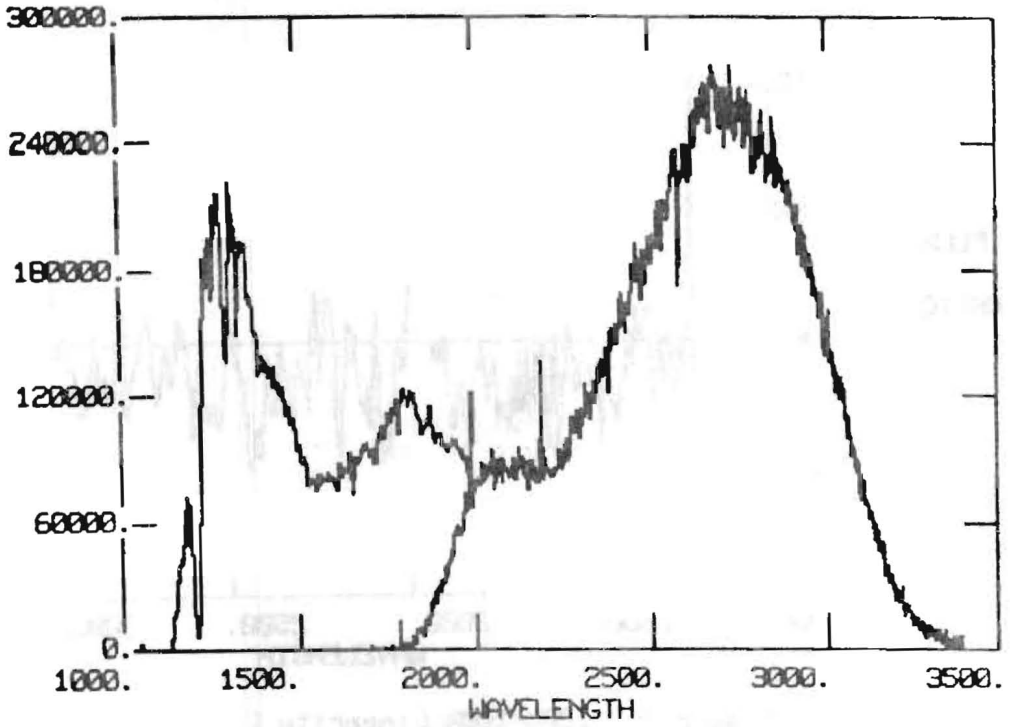

Figure 1. Net Flux Numbers for 100% Trailed Reference Spectra of HD 60753. SWP 3219 and LWR 2822; November, 1978

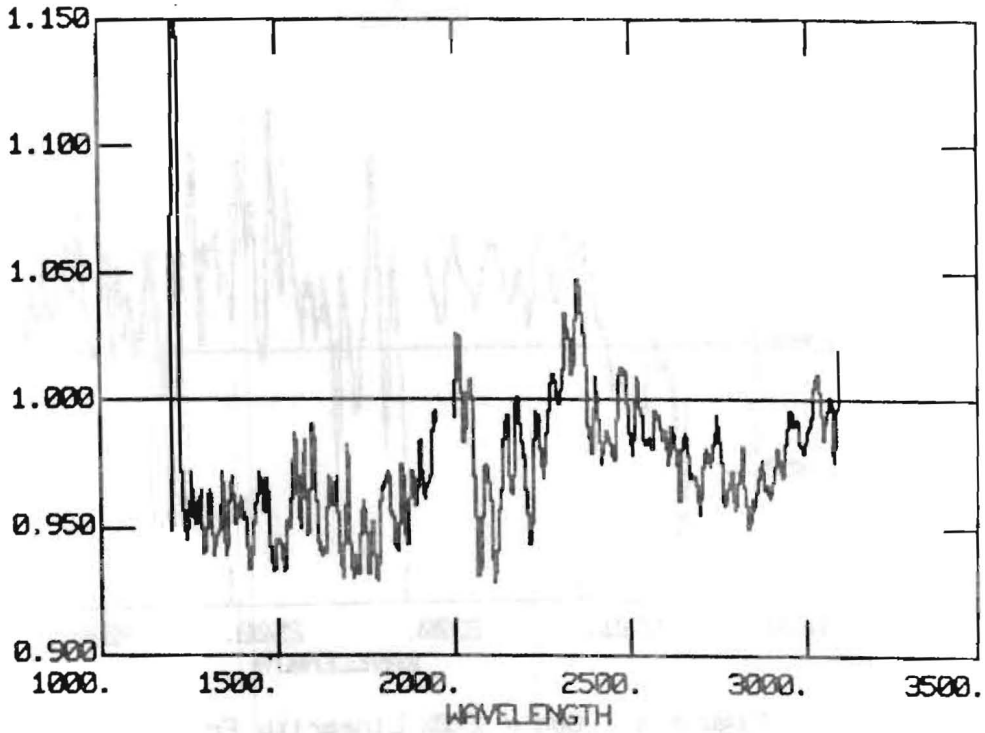

Figure 2a. Reproducibility - Fluxes from 100% / 100% SWP 16582 / SWP 16587 and LWR 12818 / LWR 12823 March, 1982

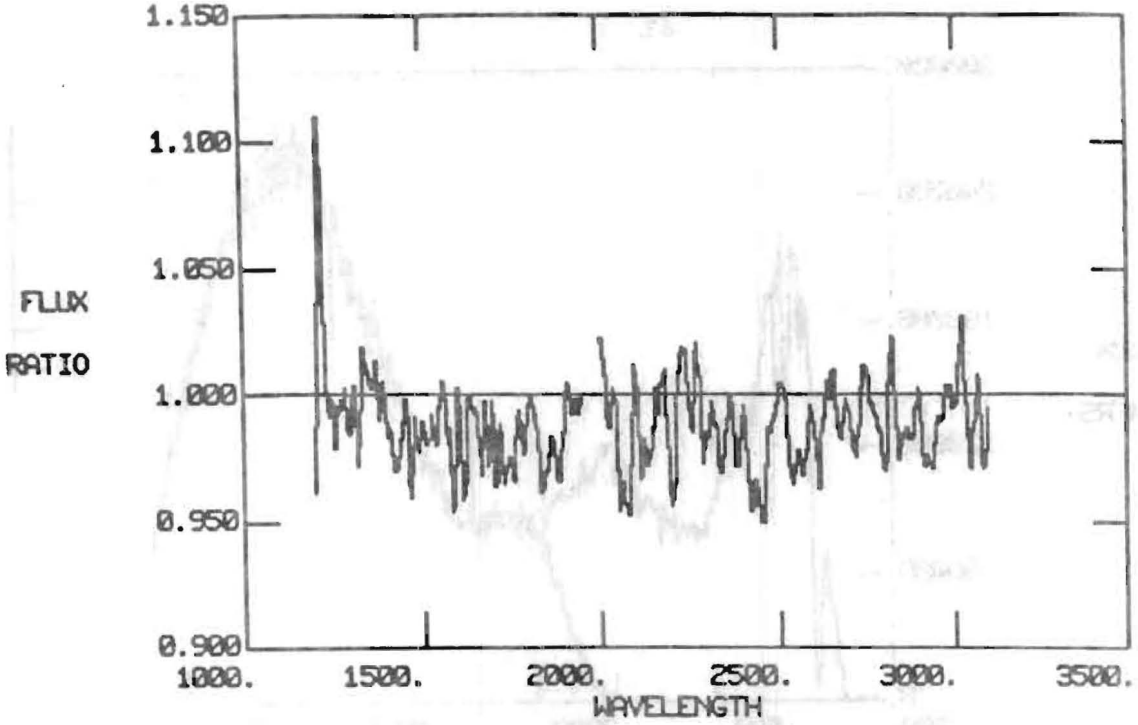

Figure 3. 120%/100% Linearity Errors
SWP 16585 / SWP 16587
LWR 12820 / LWR 12823
March, 1982

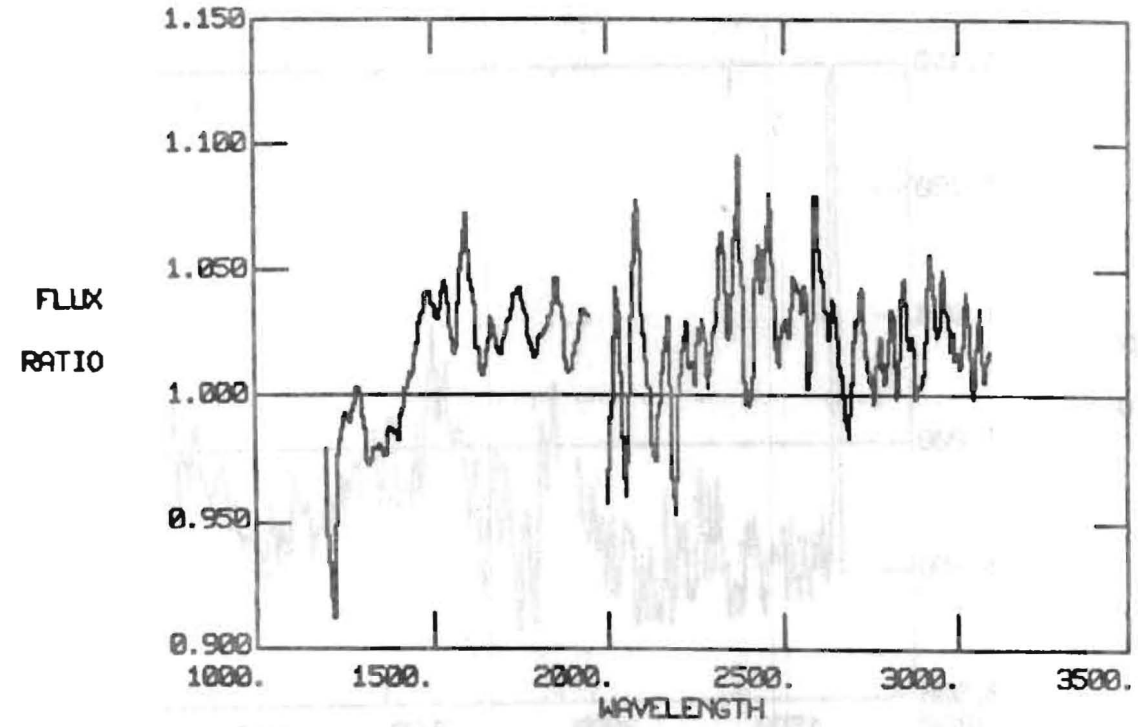

Figure 4. 60% / 100% Linearity Errors
SWP 3223 / SWP 3219
LWR 2826 / LWR 2822
November, 1978

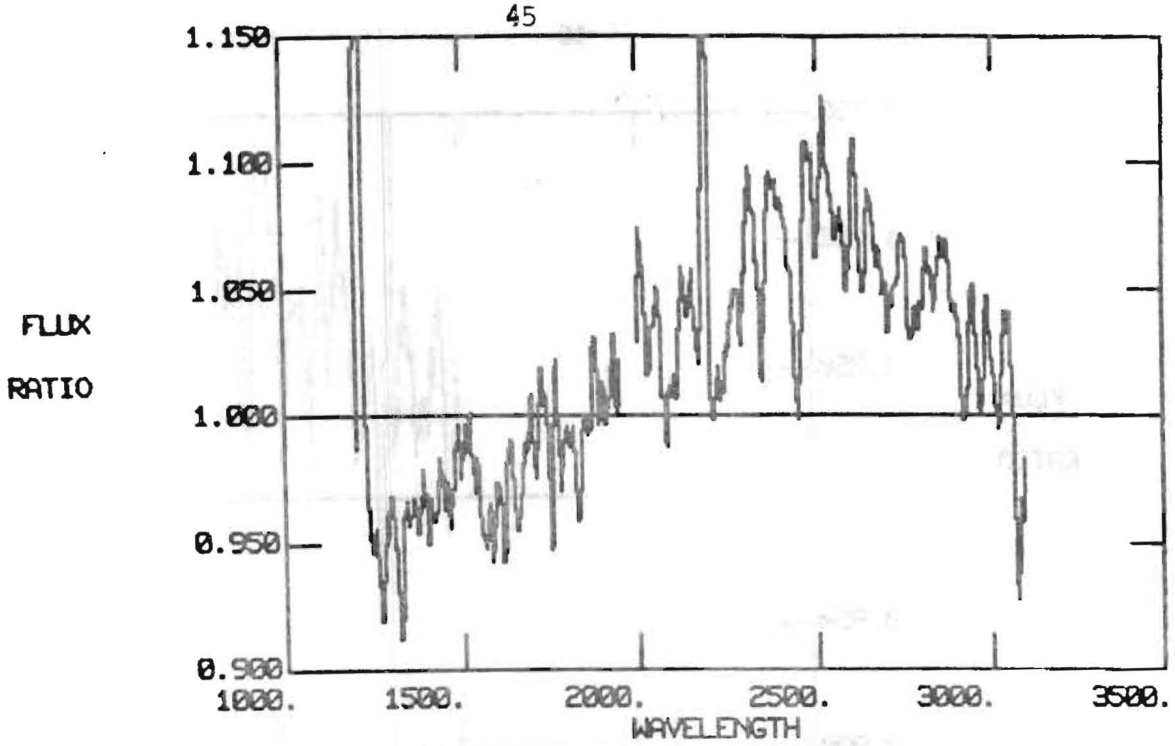

Figure 5. 40% / 100% Linearity Errors
SWP 16583 / SWP 16587 Mar, 1982
LWR 12120 / LWR 12823 Dec, 1981 / Mar, 1982

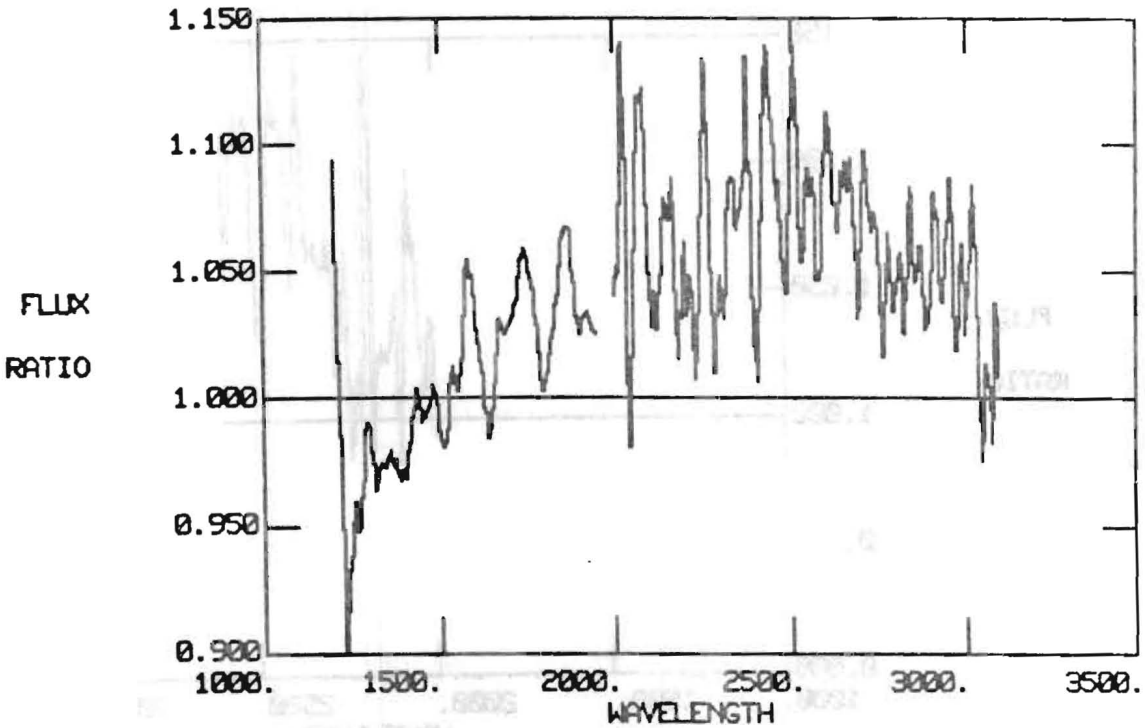

Figure 6. 30% / 100% Linearity Errors in November 1978
SWP 3222 / SWP 3219
LWR 2825 / LWR 2822

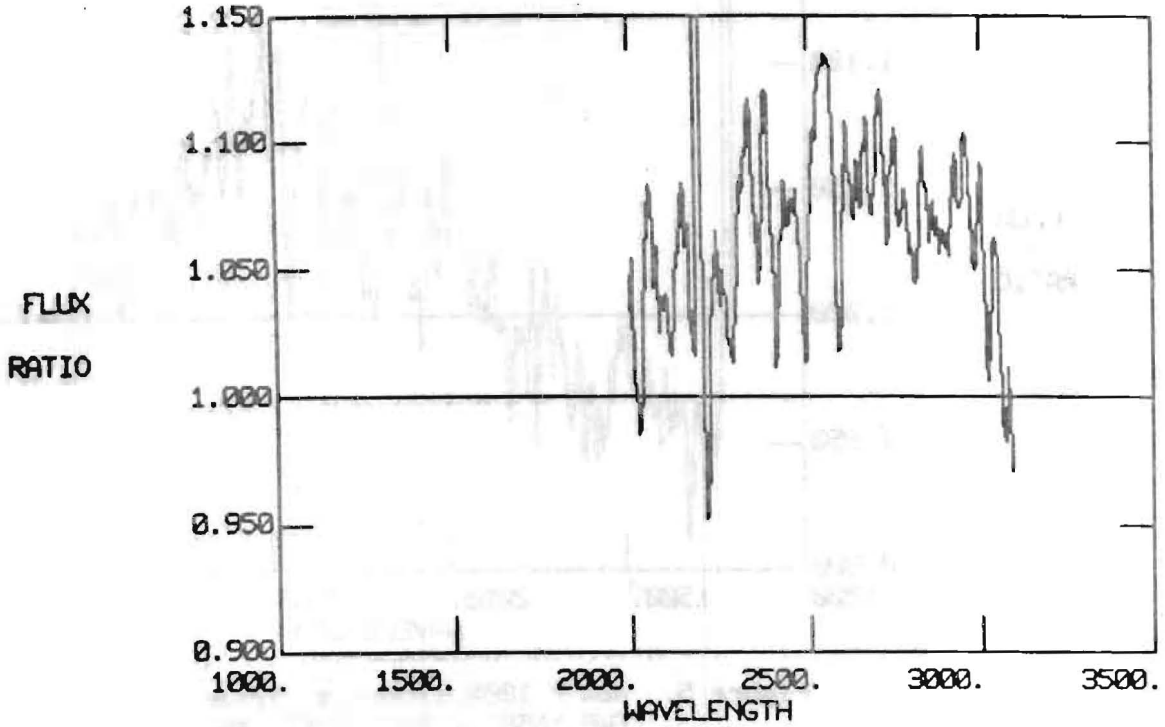

Figure 7. 30% / 100% Linearity Errors in February, 1981
((LWR 9981 + LWR 9985)/2) / LWR 9984

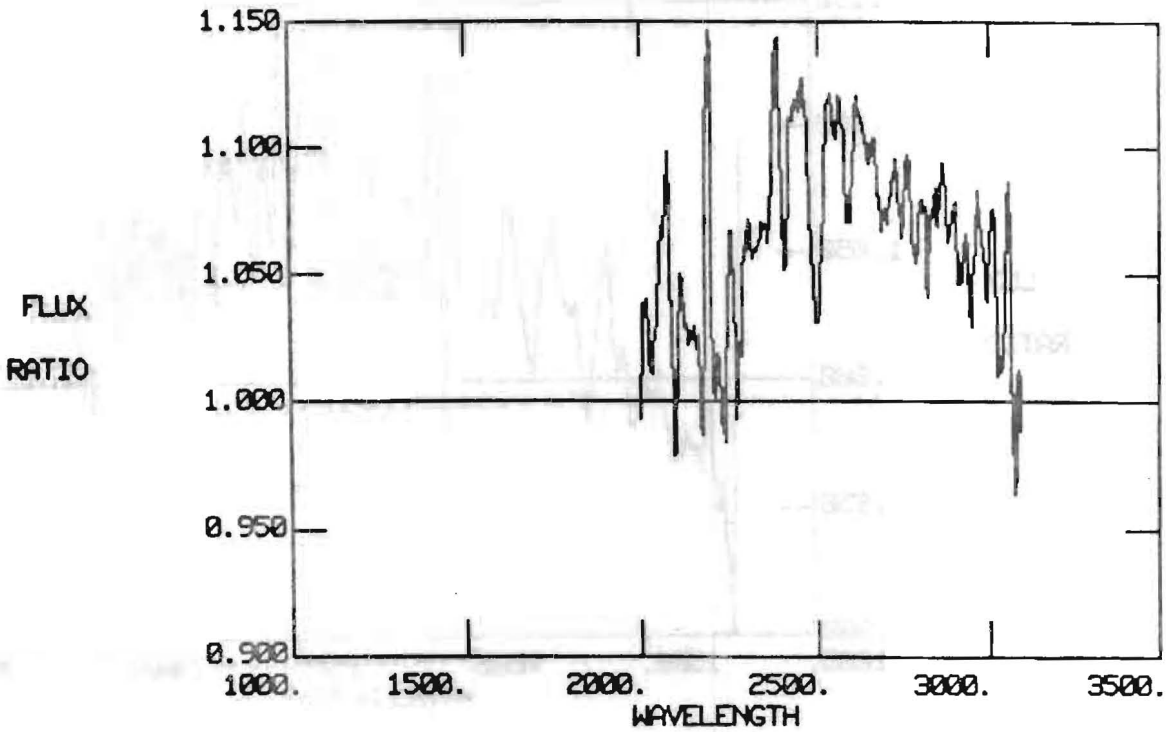

Figure 8. 30% / 100% Linearity Errors in December 1981
((LWR 12118 + LWR 12121)/2) / LWR 12117

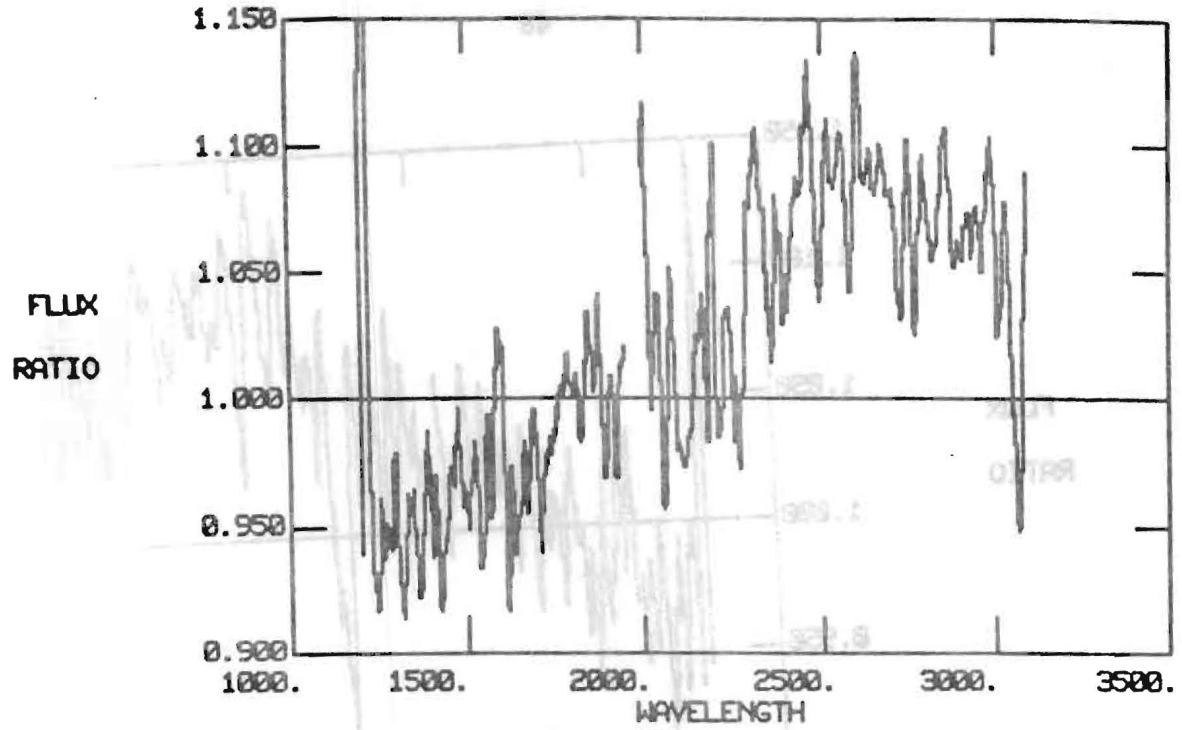

Figure 9. 30% / 100% Linearity Errors in March, 1982
SWP 16584 / SWP 16587
LWR 12819 / LWR 12823

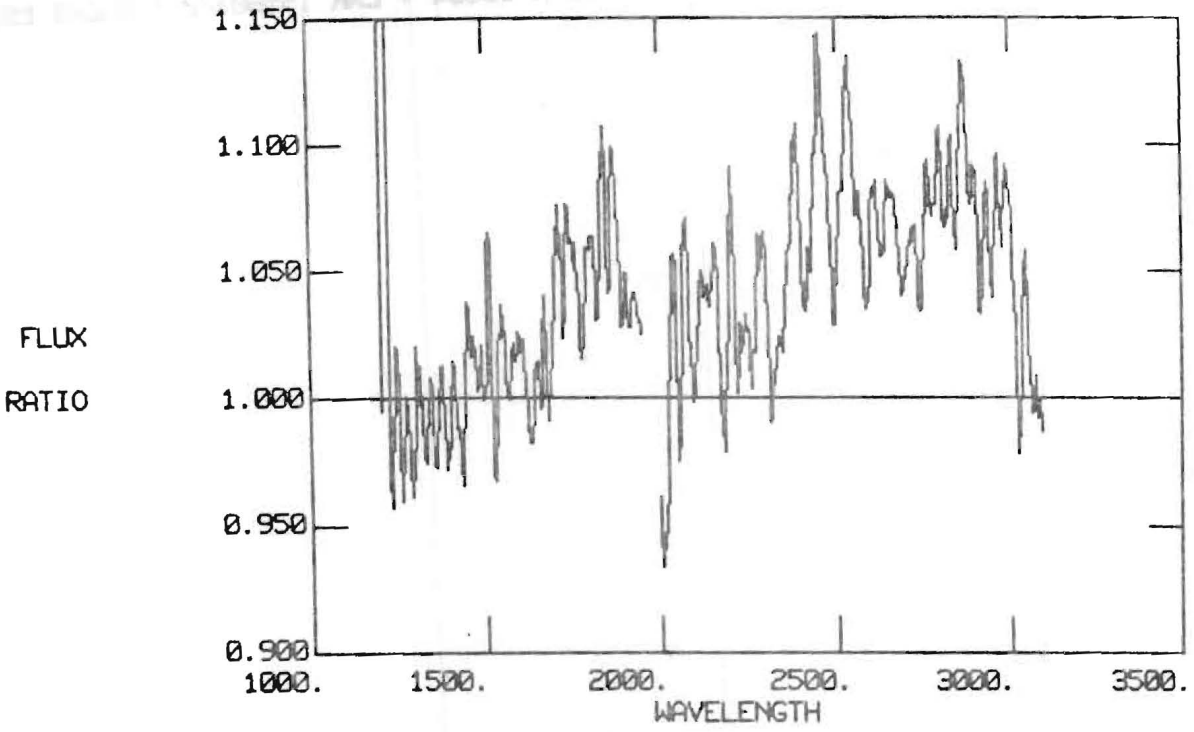

Figure 10. 30% / 100% Linearity Errors in Sept. 1982
SWP 18058 / SWP 18057
LWR 14188 / LWR 14191

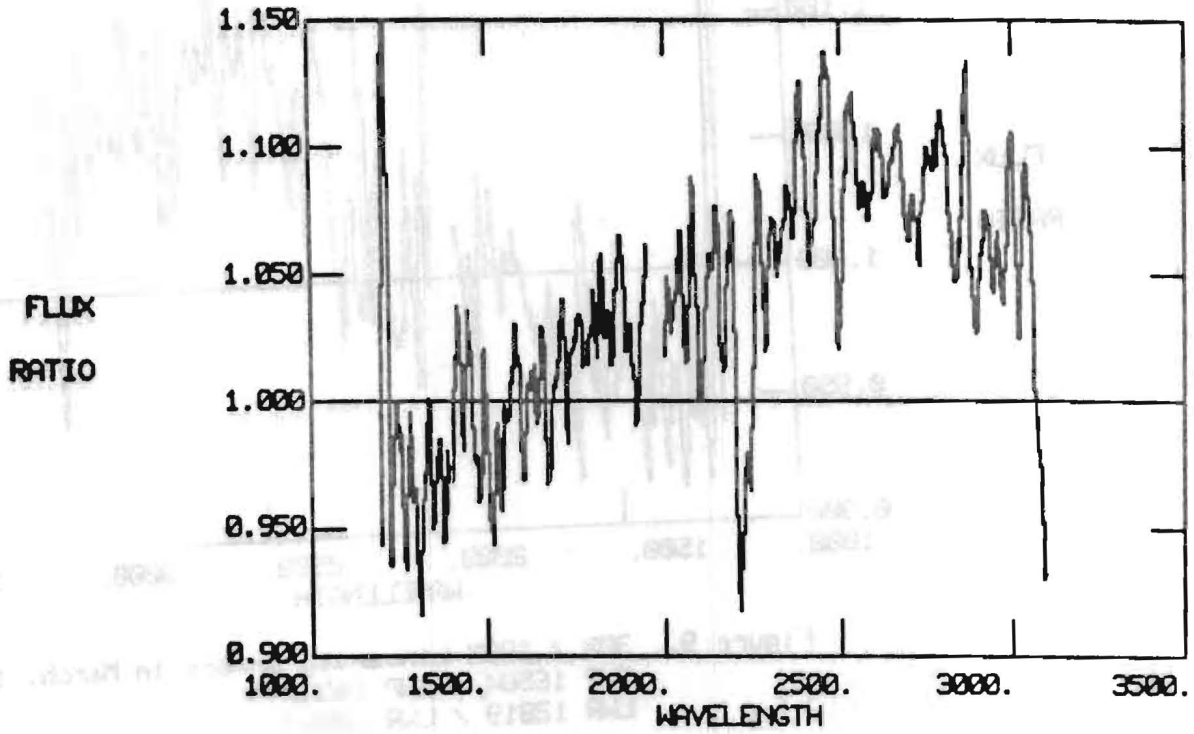

Figure 11. 30% / 100% Linearity Errors in March 1983
SWP 19410 / SWP 19409
((LWR 15554 + LWR 15560)/2) / LWR 15557

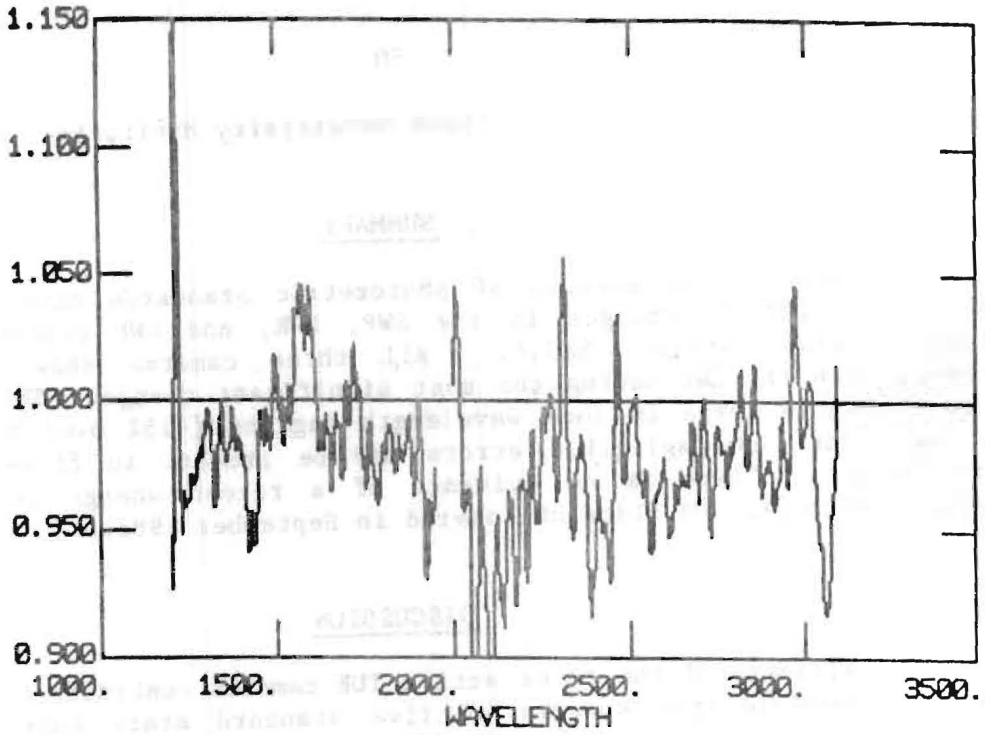

Figure 12. 60% (with moderate background) / 100% Linearity Errors
SWP 16586 / SWP 16587
LWR 12822 / LWR 12823
March, 1982

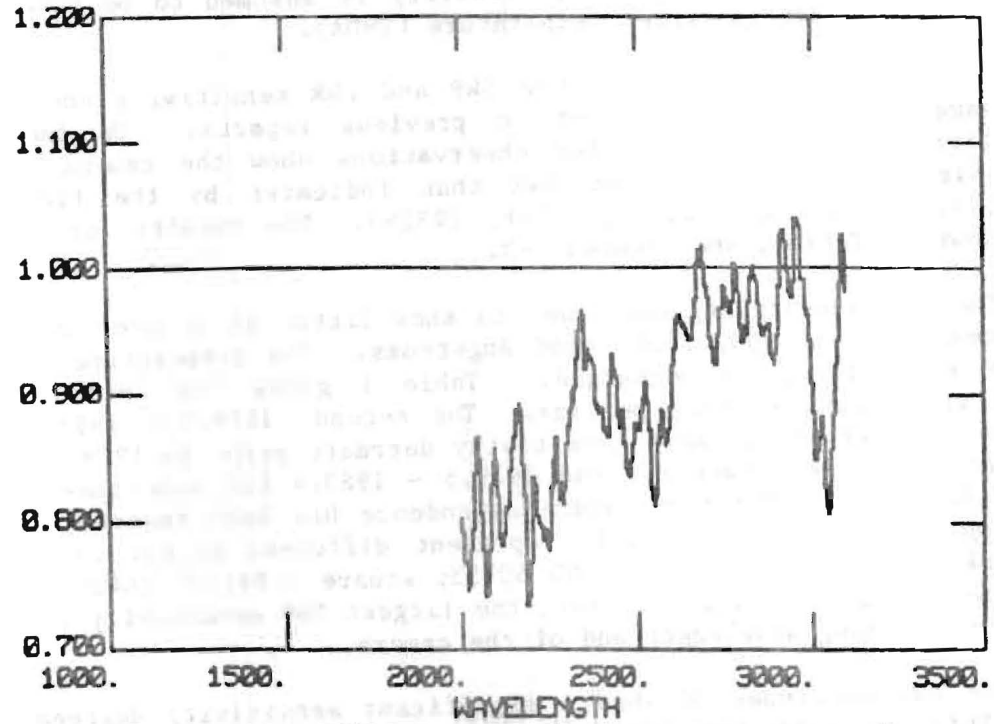

Figure 13. 71% Linearity Errors with High background
LWR 8218 / LWR 9984
July, 1980 / Feb, 1981

Low-Dispersion Quick-Look Sensitivity Monitoring. VII.*

SUMMARY

Low-dispersion IUE spectra of photometric standards have been analyzed to look for sensitivity changes in the SWP, LWR, and LWP cameras. This report includes images through 1983.6. All three cameras show some sensitivity decrease, with the LWR having the most significant change. The LWR changes are now sufficiently large in some wavelength regions (-15% over 5.5 years at 2400 Angstroms) that non-negligible errors may be present in fluxes extracted from recent images. There is no evidence of a recent change in LWR sensitivity correlated with the LWR flare discovered in September 1983.

DISCUSSION

The sensitivity of the three active IUE cameras continues to be monitored by analyzing low-dispersion spectra of five standard stars (BD+28° 4211, BD+33° 2642, BD+75° 325, HD 60753, and HD 93521). The SWP and LWP sensitivity data bases have been extended to 1983.4. The LWR data base includes spectra through 1983.6.

The method of analysis (Holm and Schiffer, 1980) is the one used in previous reports (e.g. Schiffer, 1982; Sonneborn and Schiffer, 1982a). The spectra are ratioed to a reference spectrum for each star and placed in several wavelength bins. The flux ratios are fit with a multiple linear regression to find the rate of change in each bin and the temperature dependence for the camera. The temperature dependence of the sensitivity is assumed to be time-independent and is fit to the head amplifier temperature (THDA).

This analysis shows that the SWP and LWR sensitivity continues to exhibit the same general trends found in previous reports. On the other hand, a significantly larger set of LWP observations show the camera to be stable and more similar to the SWP and LWR than indicated by the first study of LWP sensitivity (Sonneborn and Schiffer, 1982b). The results for all three cameras are shown in Table 1 and Figures 1-3.

The SWP sensitivity continues to show little or no decrease in 150 Angstrom bins centered at 1300, 1550, 1850 Angstroms. The temperature dependence of the camera sensitivity is unchanged. Table 1 gives the rate of change in SWP sensitivity over two time periods. The second, 1979.5 - 1983.4, was chosen to exclude the period of rapid sensitivity decrease prior to 1979.5. Figure 1 shows the SWP regression lines for the 1979.5 - 1983.4 fit superposed on the complete set of SWP data. The temperature dependence has been removed from the data for plotting. The various symbols represent different stars: plus - BD+28° 4211; asterisk - HD 93521; diamond - HD 60753; square - BD+33° 2642; triangle - BD+75° 325. As found in earlier studies, the largest SWP sensitivity changes are taking place at the long wavelength end of the camera.

The LWR continues to show a significant sensitivity degredation (see Table 1). This is most pronounced in the 2400 Angstrom region where the camera sensitivity has decreased about 15% over the course of the IUE mission. The changes in the 2600 and 2900 Angstrom bins are about half as large as that at

* Reprinted from NASA IUE Newsletter No.23 p23.

shorter wavelengths. The LWR data are shown in Figure 2 with the 1978 - 1983.6 regression lines. These changes are now sufficiently large that there may be non-negligible errors in fluxes extracted from recent images. Cacciari and Wamsteker (1983) found that spectra of BD+75° 325 (in 100 Angstrom bins) show the LWR sensitivity changes to be a strong function of wavelength, with the largest decrease (15-20%) occurring near 2300 Angstroms. Work is now in progress at Goddard to determine the wavelength and time dependence of the LWR sensitivity changes at a resolution of 25 Angstroms using the data for all five standard stars.

There is concern that the recently discovered LWR flare may be affecting the camera sensitivity. LWR images from September and early October 1983 have recently been analyzed and compared with the LWR sensitivity data discussed above. These images are completely consistent with earlier data and trends shown in Figure 2, particularly in the 2400 Angstrom region.

A total of 24 suitable observations were available for the initial study of LWP sensitivity (Sonneborn and Schiffer, 1982b). In the past year the data for LWP sensitivity analysis has more than doubled and now includes 57 spectra. The additional data show some of the earlier conclusions to be incorrect. In particular, there are no wavelength regions with increasing sensitivity.

Table 1 shows that the LWP sensitivity is decreasing in the 2350 - 2650 Angstrom region at approximately 1.0 to 1.4 %/year. The sensitivity is unchanged in other wavelength regions. Representative graphs of the sensitivity data are shown in Figure 3. It is reassuring to note that the RMS error in an individual observation is about the same for all three cameras. The LWP sensitivity temperature dependence (-0.21±0.05 %/°C) is significantly lower than the SWP and LWR.

The mean camera temperatures (THDA) continue to rise at nearly a constant rate (about 0.4°C/year), as have spacecraft temperatures in general. (The cause of the increases and their stabilization points are still unknown.) The THDA data as a function of time is shown in Figure 4 (SWP and LWR) and Figure 5 (LWP). The mean THDA at 1983.4 is 9.5°C (SWP), 14.4°C (LWR), and 9.1°C (LWP).

George Sonneborn and Matthew P. Garhart
31 October 1983

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Schiffer, F.H. 1982. NASA IUE Newsletter No. 19, pg.33.

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Report to the Three-Agency Meeting, September 1982

Table 1

Results of SWP, LWR, and LWP sensitivity analysis

SWP camera

Temperature dependence: -0.54±0.05 %/°C
RMS error in an individual observation: 3.3%
171 observations of 4 stars

	Time dependence	
wavelength	1978 - 1983.4	1979.5 - 1983.4
1300±75A	-0.37±0.13 %/year	-0.46±0.16 %/year
1550 "	-0.40 "	+0.16 "
1850 "	-1.25 "	-0.63 "

LWR camera

Temperature dependence: -0.78±0.05 %/°C
RMS error in an individual observation: 3.4%
201 observations of 5 stars

	Time dependence	
wavelength	1978 - 1983.6	1979.5 - 1983.6
2400±150A	-2.30±0.11 %/year	-2.56±0.14 %/year
2600± 50A	-1.19 "	-1.43 "
2900±150A	-1.13 "	-1.50 "

LWP camera

Temparature dependence: -0.21±0.05 %/°C
RMS error in an individual observation: 3.5%
57 observations of 5 stars

	Time dependence
wavelength	1980 - 1983.4
2150±75A	-0.14±0.21 %/year
2300 "	-0.91 "
2450 "	-1.42 "
2600 "	-1.12 "
2750 "	-0.13 "
2900 "	+0.07 "

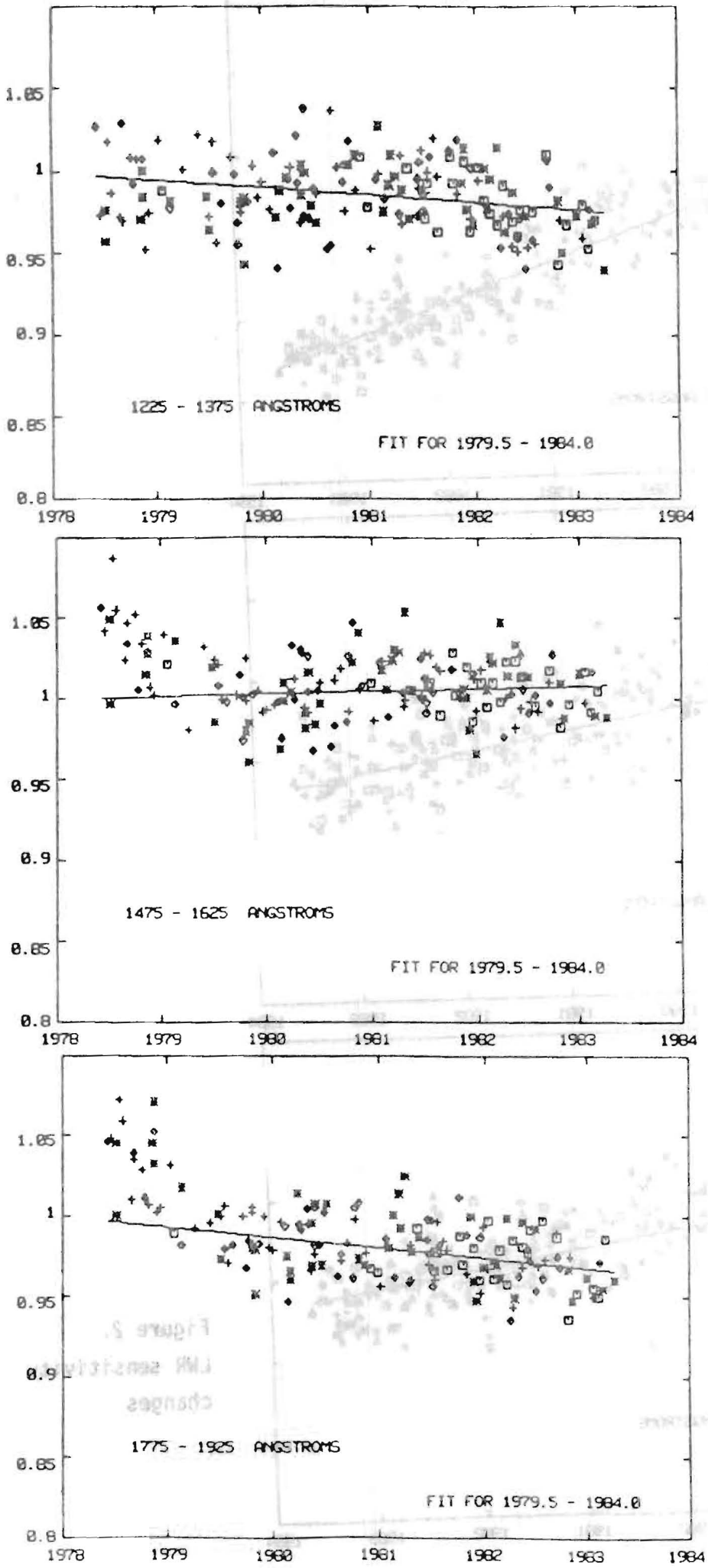

Figure 1.

SWP sensitivity changes

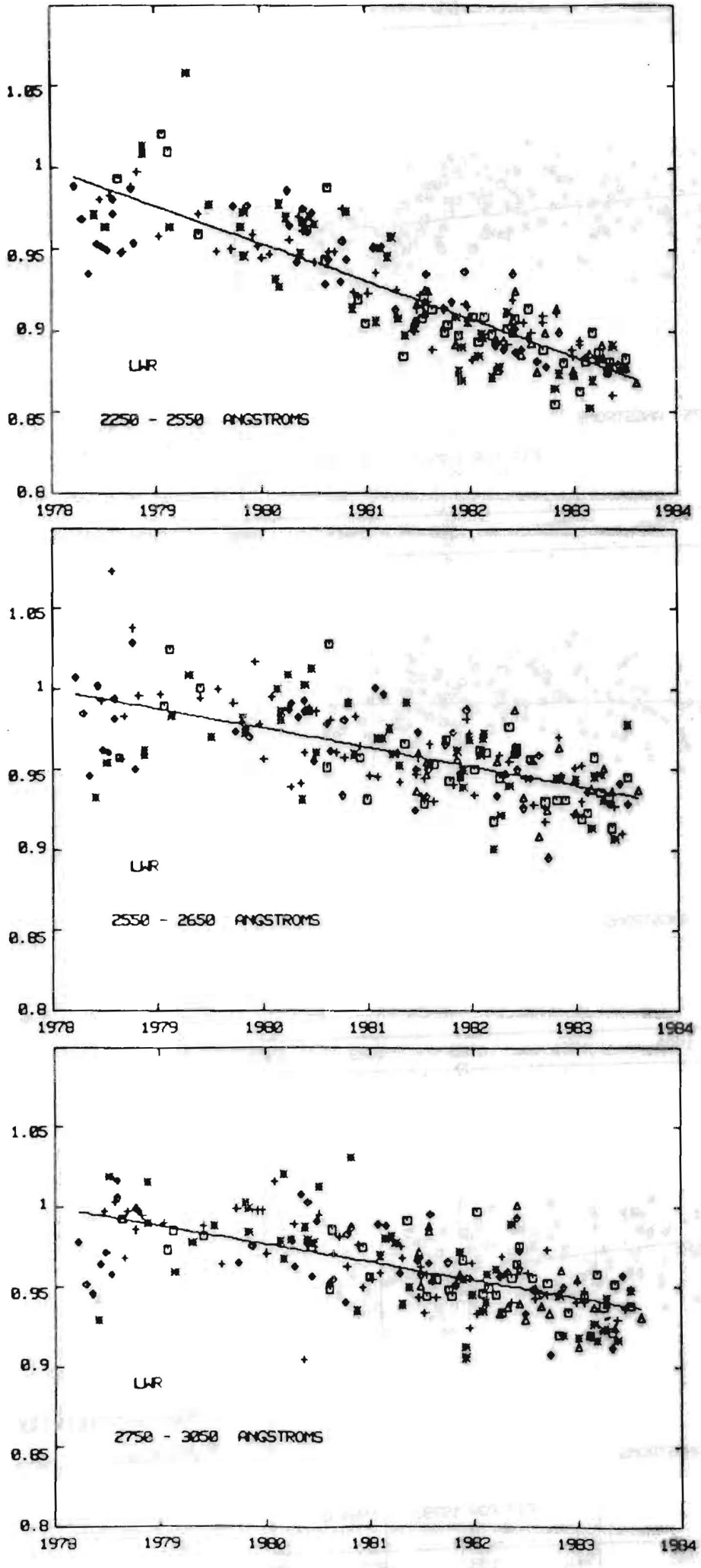

Figure 2.
LWR sensitivity changes

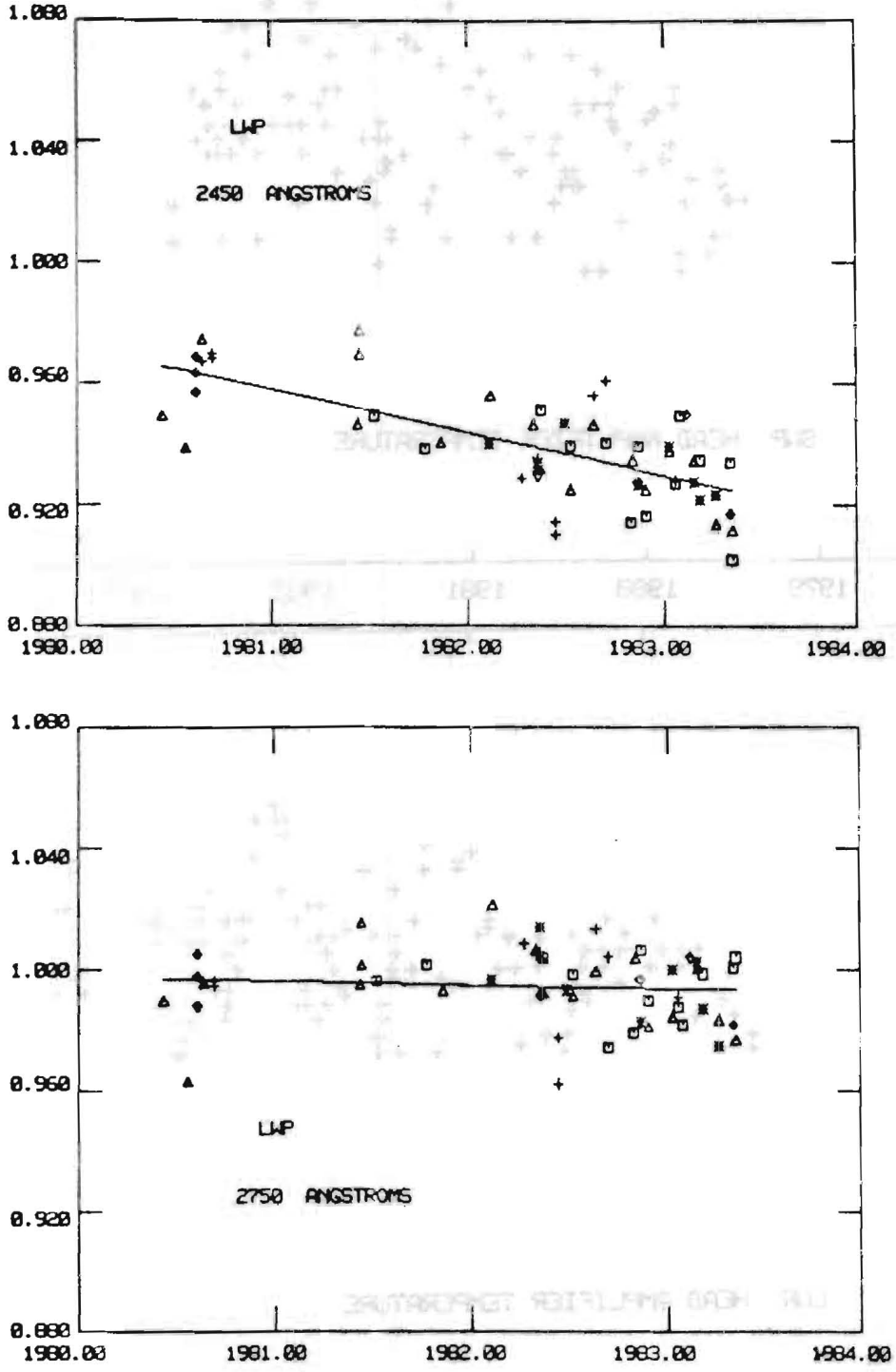

Figure 3. Representative LWP sensitivity changes

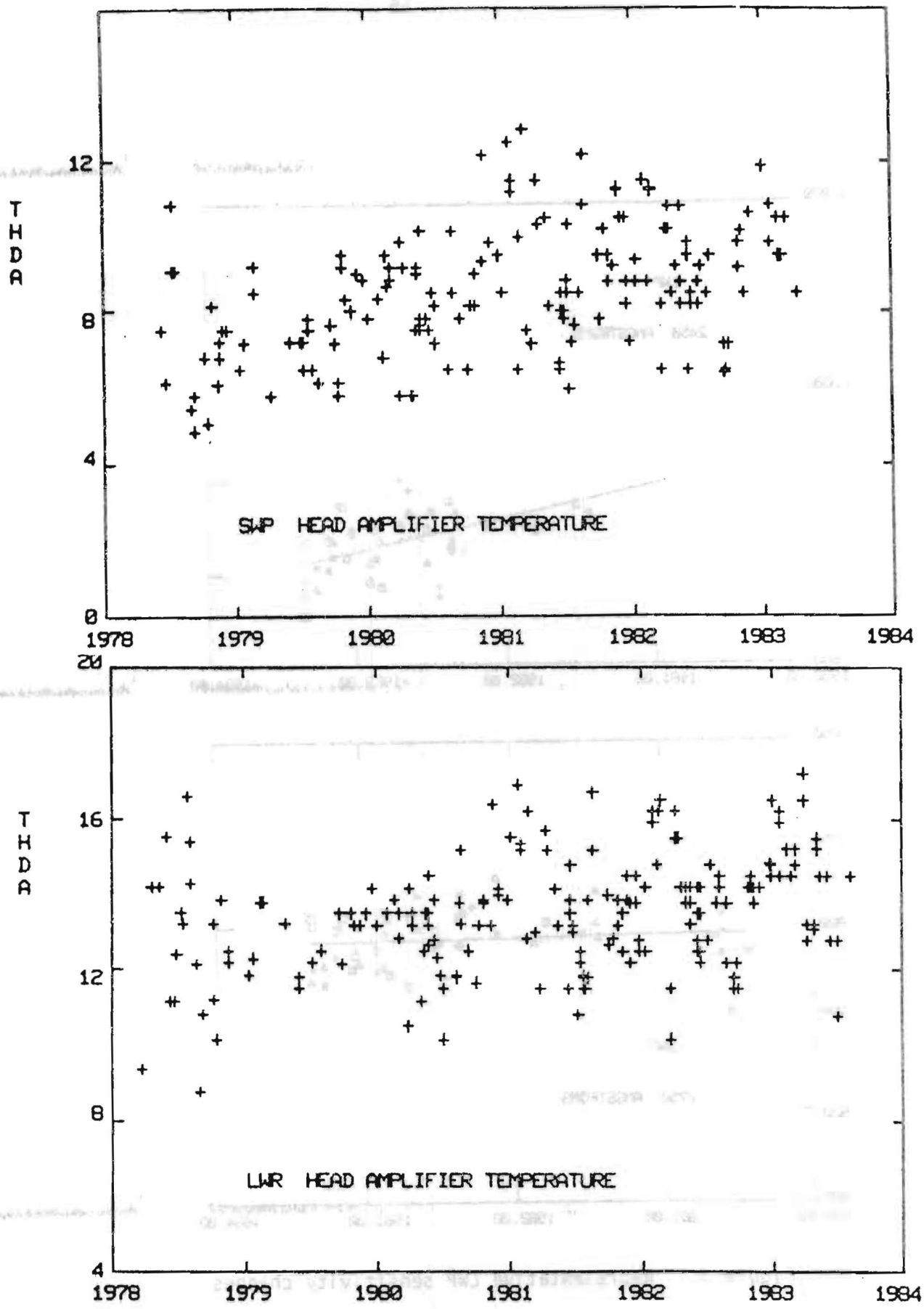

Figure 4. SWP and LWR THDA for sensitivity monitoring images as a function of time.

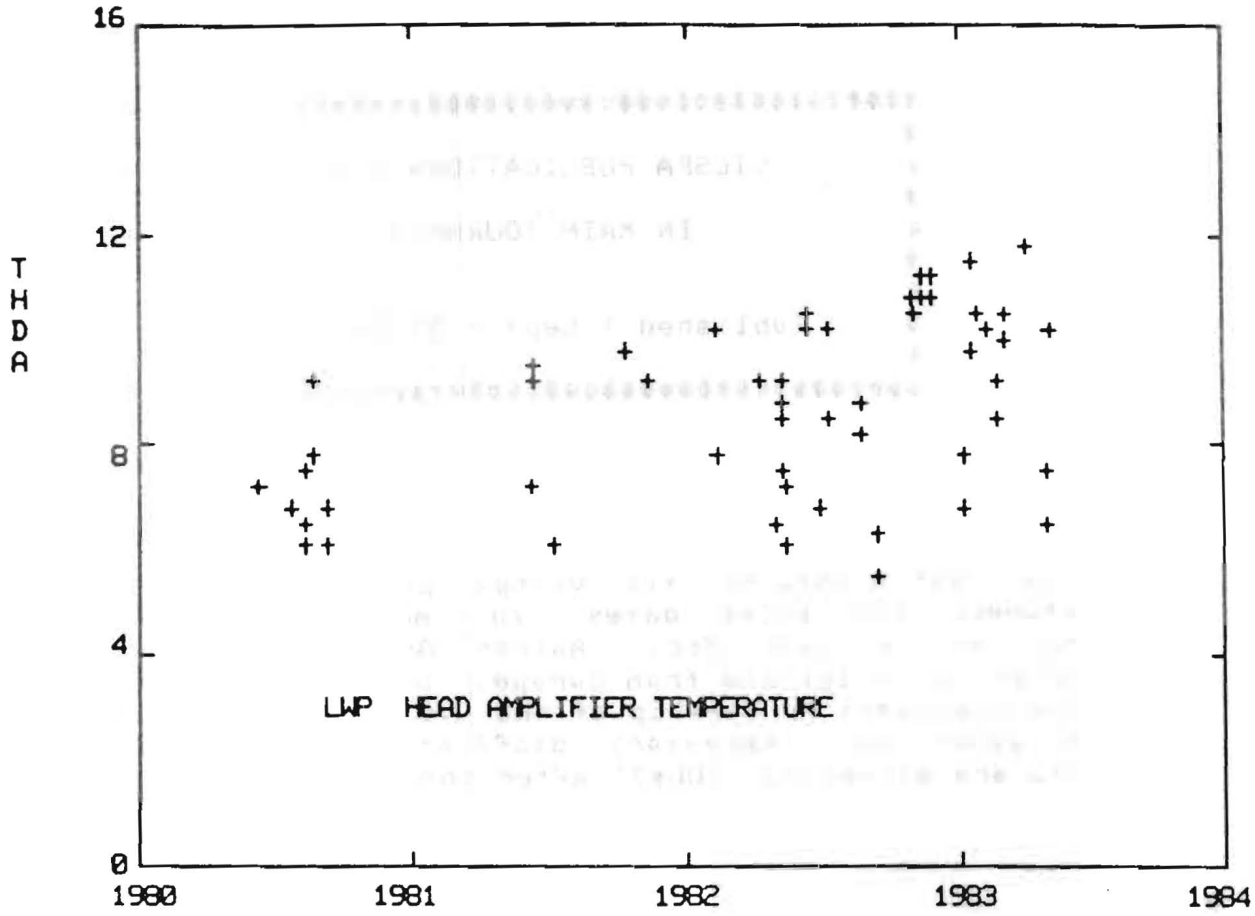

Figure 5. LWP THDA as a function of time

VILSPA PUBLICATIONS LIST

IN MAIN JOURNALS

Published 1 Sept - 31 Dec 1983

This list contains all Vilspa papers that have appeared betweeen the above dates in major refereed journals (Mon. Not. R. astr. Soc., Astron. Astrophys., Astrophys. J.) and which originate from Europe. Underlining of an author's name indicates membership of the Vilspa Observatory staff, and papers by Observatory staff on topics not involving IUE data are marked by '(Obs)' after the entry.

We remind users that, in any publications resulting from IUE data, whether it be from their own allocated shifts or data released from the Archive, they should acknowledge the use of the IUE Satellite and the Agency - ESA, NASA or SERC as appropriate, in a footnote on the title page. The following are examples of some of the possibilities.

Based on observations by the International Ultraviolet Explorer, collected at Villafranca Satellite Tracking Station of the European Space Agency. (In the case of one's own observations).

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MERGED LOG OF IUE OBSERVATIONS

1 AUGUST 1983 - 31 DECEMBER 1983

The merged log of Vilspa and Goddard images for the above dates is listed in order of right ascension.

The programme reference codes (column 1) identifying the ESA and NASA programmes can be found in IUE ESA Newsletter No.16 p45 & 55.

The Object Classification Codes (column 3) and the Vilspa Exposure Classification Codes (column 16) are listed overleaf.

CLASSIFICATION OF OBJECTS USED IN THE JOINT ESA/SERC LOG OF IUE OBSERVATIONS
****

00	SUN	50	R, N OR S TYPES
01	EARTH	51	LONG PERIOD VARIABLE STARS
02	MOON	52	IRREGULAR VARIABLES
03	PLANET	53	REGULAR VARIABLES
04	PLANETARY SATELLITE	54	DWARF NOVAE
05	MINOR PLANET	55	CLASSICAL NOVAE
06	COMET	56	SUPERNOVAE
07	INTERPLANETARY MEDIUM	57	SYMBIOTIC STARS
08		58	T TAURI
09		59	X-RAY
10	W C	60	SHELL STAR
11	W N	61	ETA CARINAE
12	MAIN SEQUENCE O	62	PULSAR
13	SUPERGIANT O	63	NOVA-LIKE
14	OE	64	STELLAR OBJECT NOT INCLUDED ABOVE
15	OF	65	
16	SD O	66	
17	WD O	67	
18		68	
19	UV-STRONG	69	
20	B0-B2 V-IV	70	PLANETARY NEBULAR+CENTRAL STAR
21	B3-B5 V-IV	71	PLANETARY NEBULAR-CENTRAL STAR
22	B6-B9,5 V-IV	72	H II REGION
23	B0-B2 III-I	73	REFLECTION NEBULA
24	B3-B5 III-I	74	DARK CLOUD (ABSORPTION SPECTRUM)
25	B6-B9,5 III-I	75	SUPERNOVA REMNANT
26	BE	76	RING NEBULA (SHOCK-IONISED)
27	BP	77	
28	SDB	78	
29	WDB	79	
30	A0-A3 V-IV	80	SPIRAL GALAXY
31	A4-A9 V-IV	81	ELLIPTICAL GALAXY
32	A0-A3 III-I	82	IRREGULAR GALAXY
33	A4-A9 III-I	83	GLOBULAR CLUSTER
34	AE	84	SEYFERT GALAXY
35	AM	85	QUASAR
36	AP	86	RADIO GALAXY
37	WDA	87	BL LACERTAE OBJECT
38		88	EMISSION LINE GALAXY (NON-SEYFERT)
39	COMPOSITE	89	
40	F0-F2	90	INTERGALACTIC MEDIUM
41	F3-F9	91	
42	FP	92	
43	LATE TYPE DEGENERATE STARS	93	
44	G (TO 1FEB79); GIV-VI (FROM 1FEB79)	94	
45	G I-II (FROM 1FEB79)	95	
46	K (TO 1FEB79); K IV-VI (FROM 1FEB79)	96	
47	K I-III (FROM 1FEB79)	97	
48	M (TO 1FEB79); M DWARFS (FRM 1FEB79)	98	WAVELENGTH CALIBRATION (NASA LOG)
49	M I-III (FROM 1 FEB79)	99	NULLS AND FLAT FIELDS (NASA LOG)

THE CLASSIFICATION IS SUPPLIED BY D STICKLAND FOR USE ONLY WITHIN THE PROJECT

EXPOSURE CLASSIFICATION CODES
****

SINCE 1 AUG 78 A TWO-DIGIT CODE HAS BEEN USED TO DESCRIBE EXPOSURE LEVELS. THIS CODE OCCUPIES THE FIRST TWO CHARACTER POSITIONS OF THE COMMENT FIELD.

DIGIT 1: EXPOSURE LEVEL OF CONTINUUM
DIGIT 2: EXPOSURE LEVEL OF EMISSION LINES

THE CLASSIFICATIONS BELOW APPLY TO BOTH:

0: NOT APPLICABLE
1: NO SPECTRUM VISIBLE
2: FAINT SPECTRUM: MAX DN < 20 ABOVE BACKGROUND
3: UNDEREXPOSED: MAX DN < 100 ABOVE BACKGROUND
4: WEAK: MAX DN BETWEEN 100 AMD 150 ABOVE BACKGROUND
5: GOOD: NO SATURATION BUT MAX DN OVER 150 ABOVE BACKGROUND
6: A BIT STRONG: A FEW PIXELS SATURATED
7: SATURATED FOR LESS THAN HALF THE SPECTRUM
8: MOSTLY SATURATED BUT SOME PARTS USABLE
9: COMPLETELY SATURATED

ON 1 SEP 79 A FURTHER DIGIT WAS ADDED TO DESCRIBE THE LEVEL OF THE BACKGROUND. THE MEAN DN GIVEN BY A SUBSET HISTOGRAM OF WIDTH 2 PIXELS BETWEEN:

SWP 550,130 AND 685,310
AND LWR 160,195 AND 90,300

HAS BEEN CODED AS FOLLOWS: (LIMITS INCLUSIVE)

0 DN<20
1 21<DN<30
2 31<DN<40
3 41<DN<50
4 51<DN<60
5 61<DN<70
6 71<DN<80
7 81<DN<90
8 91<DN<100
9 DN>101
X SATURATED

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
FA032	NULL IMAGE	99	9999	0000000	000000	H	2	16856		83092300	000000	000000	000000	000000		V
PHCAL	NULL	99	9999	0000000	000000	H	1	02279	L	83111615	000000	000000	153455	000000		V CAMERA SWITCH NULL
FA032	NULL	99	9999	0000000	000000	H	1	02004		83092300	000000	000000	000000	000000		V READG1
FM038	NULL	99	9999	0000000	-000000	H	2	16871		83092500	000000	000000	000000	000000		V
PHCAL	NULL	99	9999	0000000	000000	L	2	17007		83112013	000000	000000	135100	000000		V HIGH GAIN READ
PHCAL	100%TFLOOD	99	9999	0000000	000000	L	1	02053		83101500	000000	000000	000000	000140		V
FC201	60% CALUV	99	9999	0000000	000000	L	2	17008		83112014	141736	000153	000000	000000		V FINAL UVTEMP=38
FC201	20% CALUV	99	9999	0000000	000000	L	2	17009		83112014	145108	000038	000000	000000		V FINAL UV TEMP 36 C
PHCAL	160%CALUV	99	9999	0000000	000000	L	1	02054		83101519	000000	000000	191850	000531		V FINAL UVF=39
PHCAL	60%CALUV	99	9999	0000000	000000	L	1	02052		83101517	000000	000000	172600	000204		V FINAL UVF=39
PHCAL	120%CALUV	99	9999	0000000	000000	L	1	02051		83101516	000000	000000	165810	000408		V FINAL UVF=41
PHCAL	20%CALUV	99	9999	0000000	000000	L	1	02050		83101516	000000	000000	161439	000041		V FINAL UVF=36
PHCAL	SKY BKGD	07	9999	0000000	000000	H	2	16892	L	83092816	000000	000000	162251	031500	118	V UVC1(2) RED-4.467 KV(-4.1
PHCAL	60%CALUV	99	9999	0000000	000000	L	1	02049		83101500	000000	000000	000000	000204		V FINAL UVF=39
PHCAL	NULL	99	9999	0000000	000000	L	1	02048		83101500	000000	000000	000000	000000		V
PHCAL	NULL	99	9999	0000000	000000	L	2	16982		83101500	000000	000000	000000	000000		V
EI219	NULL	99	9999	0000000	000000	L	2	16968	L	83101120	000000	000000	000000	000000		V
FE052	NULL	99	9999	0000000	000000	L	2	16951		83100800	000000	000000	000000	000000		V
FE052	NULL	99	9999	0000000	000000	L	1	02018		83100800	000000	000000	000000	000000		V
PHCAL	SKY BKGR	07	9999	0000000	000000	H	2	16900	L	83092919	000000	000000	194100	012600	115	V UVC1(2)RED-4.742KV (-4.3T
PHCAL	2ND READ	99	9999	0000000	000000	L	1	02055		83101519	000000	000000	193400	000000		V
FC201	120%CALUV	99	9999	0000000	000000	L	2	17010		83112015	151948	000346	000000	000000		V FINAL UV TEMP 41C
FE176	NULL	99	9999	0000000	000000		2	16613		83081700	000000	000000	000000	000000		V NULL BEFORE LWR16614
PHCAL	NULL	99	9999	0000000	000000	L	1	02056		83101500	000000	000000	000000	000000		V
PHCAL	NULL	99	9999	0000000	000000	L	1	02057		83101500	000000	000000	000000	000000		V
PHCAL	NULL	99	9999	0000000	000000	L	3	21564		83111619	194600	000000	000000	000000		V
FC201	60% CALUV	99	9999	0000000	000000	L	2	17011		83112015	155207	000153	000000	000000		V FINAL UVTEMP=38
FC231	NULL	99	9999	0000000	000000	H	1	02155		83102700	000000	000000	000000	000000		V
PHCAL	NULL	99	9999	0000000	000000	L	3	21563		83111619	192600	000000	000000	000000		V
PHCAL	NULL	99	9999	0000000	000000		1	02302		83112018	000000	000000	000000	000000		V AFTER CAM SWITCH
PHCAL	NULL	99	9999	0000000	000000	L	2	16718	L	83090221	000000	000000	212039	000000		V NULL BEFORE TURNING OFF L
PHCAL	NULL	99	9999	0000000	000000	L	3	21562		83111618	185440	000000	000000	000000		V
PHCAL	160% CALUV	99	9999	0000000	000000	L	3	21561		83111618	183646	000451	000000	000000		V FINAL UVF=44
PHCAL	100%TFLOOD	99	9999	0000000	000000	L	3	21560		83111618	180612	000016	000000	000000		V
PHCAL	60% CALUV	99	9999	0000000	000000	L	3	21559		83111617	174121	000149	000000	000000		V FINAL UVF TEMP=36
PHCAL	120% CALUV	99	9999	0000000	000000	L	3	21558		83111617	171331	000338	000000	000000		V FINAL UVF TEMP=39
PHCAL	20% CALUV	99	9999	0000000	000000	L	3	21557		83111616	164807	000036	000000	000000		V FINAL UV TEMP 33
PHCAL	60% CALUV	99	9999	0000000	000000	L	3	21556		83111616	162159	000149	000000	000000		V FINAL UV TEMP 35
PHCAL	NULL	99	9999	0000000	000000	L	3	21555		83111615	005500	000000	000000	000000		V CAMERA SWITCH NULL
PHCAL	NULL	99	9999	0000000	000000	L	2	17016		83112017	000000	000000	000000	000000		V LOW GAIN READ
FC201	NULL	99	9999	0000000	000000	L	2	17015		83112017	172900	000000	000000	000000		V HIGH GAIN READ
FC201	NULL	99	9999	0000000	000000	L	2	17014		83112017	170900	000000	000000	000000		V
FE156	NULL	99	9999	0000000	000000		3	20651		83080919	000000	000000	000000	000000		V SERENDIP FOR L16559
FC201	160 CALUV	99	9999	0000000	000000	L	2	17013		83112016	165345	000501	000000	000000		V FINAL UV TEMP=39
FC201	100%TFLOOD	99	9999	0000000	000000	L	2	17012		83112016	162016	000022	000000	000000		V

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
PHCAL	60%CALUV	99	9999	0000000	000000	H	2	16777	L	83091215	000000	000000	155313	000153	V UVC1(2)RED-3.964KV (-3.6T
FA027	SB7	28	1275	0000480	-163700	L	3	20559	L	83080101	000000	000000	012009	000900 501 V
FA027	SB7	28	1279	0000480	-163700	L	2	16496	L	83080101	000000	000000	014136	001300 502 V
QSFWS	OOMARK	335	84	1380	0003452	+195529	L	1	02532	L	83123104	000000	000000	043300	005500	G E=243,C=205,B=112
QSFWS	OOMARK	335	84	1390	0003452	+195529	L	3	21922	L	83123105	000000	000000	053800	005000	G E=1.2X,C=130,B=84
QSFWS	OOMARK	335	84	1370	0003452	+195529	L	2	16681	L	83082714	000000	000000	145200	002500	G C=210,B=120
QSFWS	OOMARK	335	84	1370	0003452	+195529	L	2	16680	L	83082713	000000	000000	135200	002200	G C=1.1X,B=160
CCFLH	HD	693	41	0490	0008432	-154433	H	1	02201	L	83110303	000000	000000	034600	005000	G E=114,C=5X,B=72
FC016	HD2151		44	0311	0023090	-773200	H	2	16702	L	83083001	000000	000000	011918	001500 752 V
FC016	HD2151		44	0314	0023090	-773200	H	2	16701	L	83083000	000000	000000	003444	001500 742 V
FC016	HD2151		44	0309	0023090	-773200	H	2	16700	L	83082923	000000	000000	235917	000630 731 V
FC016	HD2151		44	0313	0023090	-773200	H	2	16698	L	83082922	000000	000000	223713	001500 751 V
FC016	HD2151		44	0309	0023090	-773200	H	2	16699	L	83082923	000000	000000	232017	001500 752 V
CCFEB	HD	3196	41	0520	0032404	-035204	L	3	21776	L	83121506	000000	000000	060600	003000	G E=196,C=3X,B=178
CCFEB	HD	3196	41	0520	0032404	-035204	H	2	17188	L	83121702	000000	000000	025300	002000	G E=117,C=180,B=40
CCFEB	HD	3196	41	0520	0032404	-035204	L	3	21784	L	83121701	000000	000000	015900	004000	G C=3X,B=74
PHCAL	ZET CAS		20	0369	0034100	533719	H	3	20993	L	83090920	000000	000000	203247	000024 501 V
PHCAL	ZET CAS		20	0372	0034100	533719	H	2	16760	L	83090920	000000	000000	203539	000021 502 V
PHCAL	ZETA CAS		20	0374	0034100	533719	H	2	17004	L	83111614	000000	000000	143023	000021	V UVC1(2)=-5KV DAC=109
PHCAL	ZETA CAS		20	0371	0034100	533719	H	2	17005	L	83111614	000000	000000	145527	000028 402 V UVC1(2) -4.5KV DAC 98
PHCAL	ZETA CAS		20	0373	0034100	533719	H	2	17006	L	83111615	000000	000000	151954	000028	V UVC1-4(2) -4.5KV DAC 98
PHCAL	HD	3360	20	0368	0034102	+533718	H	2	17023	L	83112406	000000	000000	063000	000021	G C=200,B=33
PHCAL	OO	NULL	99	0000	0034102	+533718	L	2	17022	L	83112405	000000	000000	051800	000000	G B=42
PHCAL	OO	NULL	99	0000	0034102	+533718	L	2	17021	S	83112404	045200	000000	000000	000000	G B=40
PHCAL	HD	3360	20	0370	0034103	+533719	H	1	01976	L	83081910	000000	000000	102900	000021	G C=220,B=42
PHCAL	HD	3360	20	0370	0034103	+533719	H	3	21628	L	83112707	000000	000000	071500	000007	G C=80,B=25
PHCAL	HD	3360	20	0370	0034103	+533719	H	3	20715	L	83081910	000000	000000	103300	000024	G C=180,B=32
PHCAL	HD	3360	20	0370	0034103	+533719	H	2	16624	L	83081915	000000	000000	155400	000021	G C=220,B=30
PHCAL	HD	3360	20	0370	0034103	+533719	H	3	21627	L	83112706	000000	000000	064700	000024	G C=183,B=35
PHCAL	HD	3360	21	0370	0034103	+533719	H	2	16949	L	83100813	000000	000000	130500	000021	G C=200,B=33
PHCAL	HD	3360	21	0370	0034103	+533719	H	3	21214	L	83100209	000000	000000	090000	000024	G C=190,B=30
PHCAL	HD	3360	20	0370	0034103	+533719	H	2	17024	L	83112407	000000	000000	070400	000006	G C=108,B=30
PHCAL	HD3360		20	0366	0034103	533720	L	1	01990	L	83090220	000000	000000	200959	000000 503 V TRAIL RATE 20.83,I=1
PHCAL	HD	3360	21	0370	0034103	+533719	H	1	02483	L	83122501	000000	000000	011100	000021	G C=240,B=43
PHCAL	HD	3360	22	0370	0034103	533719	H	1	02013	L	83100208	000000	000000	085600	000021	G C=208,B=40
PHCAL	HD	3360	20	0370	0034103	+533719	H	2	17028	L	83112409	000000	000000	091900	000021	G C=195,B=31
PHCAL	HD	3360	21	0370	0034103	+533719	D	9	01506	L	83122503	000000	000000	030200	016000	G NO COMMENTS
PHCAL	HD	3360	20	0370	0034103	+533719	H	3	21629	L	83112707	000000	000000	074200	000014	G C=130,B=27
PHCAL	HD	3360	20	0370	0034103	+533719	H	3	21630	L	83112708	000000	000000	080900	000031	G C=225,B=40
PHCAL	HD	3360	21	0370	0034103	+533719	H	3	21867	L	83122503	000000	000000	031600	000024	G C=200,B=33
PHCAL	HD	3360	20	0370	0034103	+533719	H	2	17027	L	83112408	000000	000000	084600	000027	G C=225,B=36
PHCAL	HD	3360	20	0370	0034103	+533719	H	2	17026	L	83112408	000000	000000	081200	000012	G C=145,B=30
PHCAL	HD	3360	20	0370	0034103	+533719	H	2	17025	L	83112407	000000	000000	073700	000006	G C=110,B=27
PHCAL	HD	3360	20	0370	0034103	+533719	H	3	21631	L	83112708	000000	000000	083500	000024	G C=190,B=35
CHFLH	OO	53 PSC	20	0580	0034108	+145724	H	3	20584	L	83080213	000000	000000	130300	000500	G C=210,B=35

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
GHFLH	OO 53 PSC	20	0580	0034108	+145724	H	2	16503	L	83080213	000000	000000	131400	000500		G C=240,B=35
FA083	BB-1	70	1400	0034449	-135927	L	3	20600	L	83080323	000000	000000	230818	004000	261	V
FA081	BB-1	70	1400	0034449	-135927	L	3	20591	L	83080223	000000	000000	234620	012000	371	V
FA083	BB-1	70	1400	0034449	-135927	L	2	16515	L	83080323	000000	000000	235311	011300	344	V
MGFLH	HD 3651	46	0580	0036454	+205852	H	1	02198	L	83110220	000000	000000	205300	010000		G E=167,C=220,B=50
EGFPH	NG 205	81	0890	0037360	+412500	L	3	21605	SL	83112121	211800	021000	211700	021000		G C=190,B=80
EGFPH	NG 205	81	0890	0037383	+412507	L	2	17019	SL	83112320	204900	027000	204800	027000		G C=130,B=80
FA010	HD4158	30	0976	0041249	-204022	L	1	02164	L	83102818	000000	000000	181254	001200	701	V
FA010	HD4158	30	0980	0041249	-204022	L	3	21388	L	83102816	000000	000000	164214	007000	501	V EXPO. TIME UNSURE-DRIFT-M
MGFLH	HD 4628	46	0580	0045455	+050126	H	1	02199	L	83110223	000000	000000	233200	009000		G E=254,C=200,B=42
CCFEB	HD 4676	41	0510	0046208	+164016	H	1	02415	L	83121507	000000	000000	071600	003000		G C=3X,B=220
CCFEB	HD 4676	41	0510	0046208	+164016	L	3	21777	L	83121508	000000	000000	080400	009000		G C=3X,B=92
HSFCW	OOBPM16274	37	1420	0047479	-522438	L	1	02450	L	83122022	000000	000000	223000	007300		G C=230,B=55
HSFCW	OOBPM16274	37	1420	0047479	-522438	L	1	02478	L	83122322	000000	000000	224900	003000		G C=120,B=40
HSFCW	OOBPM16274	37	1420	0047479	-522438	L	3	21856	L	83122318	000000	000000	184600	007000		G C=185,B=23
HSFCW	OOBPM16274	37	1420	0047479	-522438	L	3	21894	L	83122708	000000	000000	080800	010000		G C=1.5X,B=38
HSFCW	OOBPM16274	37	1420	0047479	-522438	L	3	21857	L	83122321	000000	000000	213100	007000		G C=170,B=23
HSFCW	OOBPM16274	37	1420	0047479	-522438	L	1	02503	L	83122618	000000	000000	184800	020300		G C=3X,B=73
HSFCW	OOBPM16274	37	1420	0047479	-522438	L	1	02477	L	83122320	000000	000000	201000	007300		G C=205,B=45
IGFJS	HD 5005	12	0780	0049580	+562202	H	3	20602	L	83080410	000000	000000	104800	004000		G C=165,B=40
IGFJS	HD 5005	15	0780	0049580	+562202	H	2	16517	L	83080413	000000	000000	134500	003500		G C=230,B=45
IGFJS	HD 5005	12	0780	0049580	+562202	H	2	16516	L	83080411	000000	000000	113300	005200		G C=1.5X,B=50
IGFJS	HD 5005	12	0780	0049580	+562202	H	3	20603	L	83080412	000000	000000	123600	006500		G C=230,B=57
CCFEB	HD 5015	41	0490	0050040	+605101	L	3	21270	L	83101110	000000	000000	104400	006000		G C=5X,B=82
FC254	HD 5303	45	0797	0051260	-745533	L	3	21254	L	83100719	000000	000000	194422	012300	531	V
FA152	HD5394	20	0223	0053400	602647	H	3	21771	L	83121414	000000	000000	143036	000008	501	V
FA152	HD5394	20	0214	0053403	602647	H	3	21581	L	83111919	000000	000000	192555	000008	501	V
FE152	HD5394	20	0224	0053403	602647	H	3	20642	L	83080820	000000	000000	200550	000008	500	V
FA152	HD5394	20	0220	0053403	602647	H	1	02298	L	83111919	000000	000000	192845	000007	503	V
FA255	HD5394	26	0219	0053403	602647	H	3	20988	L	83090915	000000	000000	153318	000008	500	V
BEFTS	HD 5394	26	0260	0053410	+602730	H	3	20673	L	83081312	000000	000000	125900	000008		G C=225,B=40
MLFPH	OO B37	24	1330	0054330	-724601	L	3	21595	SL	83112020	211100	002000	204400	002500		G C=108,B=23
MLFPH	OO B37	24	1330	0054330	-724601	L	2	17017	SL	83112021	213800	006000	213700	006000		G C=1.2X,B=34
MLFPH	OO B37	24	1330	0054330	-724601	L	3	21597	SL	83112103	030500	003500	030400	003500		G C=135,B=72
MLFPH	OO330 B 04	20	1550	0054434	-724542	L	2	17018	SL	83112101	012700	009000	012600	009000		G C=180,B=90
MLFPH	OO330 B 04	20	1550	0054434	-724542	L	3	21596	SL	83112023	232300	012000	232200	012000		G C=120,B=63
MLFPC	OO AV206	23	1340	0056490	-720051	L	2	16752	L	83090807	000000	000000	074200	002800		G C=180,B=30
MLFPC	OO AV206	23	1340	0056490	-720051	L	3	20964	L	83090808	000000	000000	081800	003300		G C=190,B=20
MLFPC	OO AV238	12	1380	0058169	-722941	L	3	20914	L	83090408	000000	000000	084300	003000		G C=180,B=67
MLFPC	OO AV238	12	1380	0058169	-722941	L	2	16728	L	83090408	000000	000000	080300	003300		G C=190,B=45
MLFPC	OO AV296	12	1440	0100289	-722920	L	3	20928	L	83090508	000000	000000	082900	004800		G E=168,C=190,B=45
MLFPC	OO AV296	12	1440	0100289	-722920	L	2	16735	L	83090507	000000	000000	074300	004000		G C=165,B=40
EHFEJ	OOFEIGE 11	28	1210	0101420	+035800	L	3	21667	L	83120304	000000	000000	040800	000230		G C=65,B=22
EHFEJ	OOFEIGE 11	28	1210	0101420	+035800	L	3	21666	L	83120303	000000	000000	032700	000500		G C=90,B=21
EHFEJ	OOFEIGE 11	28	1210	0101420	+035800	L	3	21665	L	83120302	000000	000000	024300	000500		G C=90,B=21

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
EHFEJ	OOFEIGE	11	28	1210	0101420	+035800	L	3	21670	L	83120305	000000	000000	055900	000115	G C=50,B=22
EHFEJ	OOFEIGE	11	28	1210	0101420	+035800	L	3	21671	L	83120306	000000	000000	063500	000035	G C=40,B=21
EHFEJ	OOFEIGE	11	28	1210	0101420	+035800	L	3	21669	L	83120305	000000	000000	052400	000115	G C=45,B=20
EHFEJ	OOFEIGE	11	28	1210	0101420	+035800	L	3	21668	L	83120304	000000	000000	044600	000230	G C=60,B=22
PHCAL	OO	NULL	99	0000	0101499	+504430	H	2	17134	L	83112709	000000	000000	092500	000000	G B=38
PHCAL	OONULL	IMG	99	0000	0101499	+504430	H	2	17144	L	83112715	000000	000000	153800	000000	G B=40
PHCAL	OONULL	IMG	99	0000	0101499	+504430	H	2	17145	L	83112716	000000	000000	160200	000000	G B=42
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17146	L	83112716	000000	000000	163900	000211	G B=131
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17147	L	83112717	000000	000000	171700	000134	G B=108
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17148	L	83112717	000000	000000	175600	000018	G B=54
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17142	L	83112714	000000	000000	144200	000000	G B=40
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17141	L	83112714	000000	000000	140900	000211	G B=133
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17140	L	83112713	000000	000000	132600	000249	G B=156
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17139	L	83112712	000000	000000	124500	000538	G B=226
PHCAL	OO	UVFLOOD	99	0000	0101499	+504430	H	2	17138	L	83112712	000000	000000	120700	000326	G B=173
PHCAL	OO	UVFLOOD	99	0000	0101499	+504430	H	2	17137	L	83112711	000000	000000	111700	000038	G B=67
PHCAL	OO	UVFLOOD	99	0000	0101499	+504430	H	2	17136	L	83112710	000000	000000	103000	000211	G B=132
PHCAL	OO	NULL	99	0000	0101499	+504430	H	2	17135	L	83112709	000000	000000	095100	000000	G B=40
PHCAL	HD	6300	20	0000	0101499	+504430	L	2	17163	L	83112803	000000	000000	034700	000026	G C=191,B=26
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17149	L	83112718	000000	000000	183800	000009	G B=48
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17150	L	83112719	000000	000000	191600	000616	G B=232
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17151	L	83112720	000000	000000	200000	000211	G B=133
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17152	L	83112720	000000	000000	205400	000616	G B=234
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17153	L	83112721	000000	000000	213600	000018	G B=53
PHCAL	OO	NULL	99	0000	0101499	+504430	H	2	17161	L	83112802	000000	000000	021200	000000	G B=41
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17160	L	83112801	000000	000000	014400	000211	G B=129
PHCAL	OO	NULL	99	0000	0101499	+504430	H	2	17159	L	83112801	000000	000000	010500	000000	G B=92
PHCAL	OO	NULL	99	0000	0101499	+504430	H	2	17158	L	83112800	000000	000000	003800	000000	G B=40
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17157	L	83112800	000000	000000	000800	000009	G B=46
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17156	L	83112723	000000	000000	232900	000211	G B=132
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17155	L	83112722	000000	000000	224900	000404	G B=187
PHCAL	OOUV	FLOOD	99	0000	0101499	+504430	H	2	17154	L	83112722	000000	000000	221300	000056	G B=82
PHCAL	OONULL	IMG	99	0000	0101499	+504430	H	2	17143	L	83112715	000000	000000	150600	000000	G B=41
PHCAL	OOUV	FLOOD	99	0000	0101509	+504431	H	2	17115	L	83112619	000000	000000	190500	000037	G B=68
PHCAL	OOUV	FLOOD	99	0000	0101509	+504431	H	2	17114	L	83112618	000000	000000	182400	000501	G B=219
PHCAL	OOUV	FLOOD	99	0000	0101509	+504431	H	2	17113	L	83112617	000000	000000	174200	000827	G B=252
PHCAL	OONULL	IMG	99	0000	0101509	+504431	H	2	17112	L	83112617	000000	000000	170700	000211	G B=133
PHCAL	OONULL	IMG	99	0000	0101509	+504431	H	2	17111	L	83112616	000000	000000	163000	000000	G B=41
PHCAL	OONULL	IMG	99	0000	0101509	+504431	H	2	17110	L	83112616	000000	000000	160400	000000	G B=41
PHCAL	OO	UVFLOOD	99	0000	0101509	+504431	H	2	17109	L	83112615	000000	000000	153100	000000	G B=40
PHCAL	OO	UVFLOOD	99	0000	0101509	+504431	H	2	17108	L	83112614	000000	000000	145000	000211	G B=134
PHCAL	OO	UVFLOOD	99	0000	0101509	+504431	H	2	17107	L	83112614	000000	000000	141400	000038	G B=69
PHCAL	OO	UVFLOOD	99	0000	0101509	+504431	H	2	17106	L	83112613	000000	000000	133500	000134	G B=111
PHCAL	OO	UVFLOOD	99	0000	0101509	+504431	H	2	17105	L	83112612	000000	000000	125600	000249	G B=158
PHCAL	OO	UVFLOOD	99	0000	0101509	+504431	H	2	17104	L	83112612	000000	000000	121300	000423	G B=203

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
PHCAL	OO UVFLOOD	99	0000	0101509	+504431	H	2	17103	L	83112611	000000	000000	113600	000211	G	B=136
PHCAL	OO NULL	99	0000	0101509	+504431	H	2	17102	L	83112610	000000	000000	101800	000000	G	B=41
PHCAL	OO NULL	99	0000	0101509	+504431	H	2	17101	L	83112609	000000	000000	095300	000000	G	B=38
PHCAL	OO NULL	99	0000	0101509	+504431	H	2	17100	L	83112609	000000	000000	090800	000000	G	B=36
PHCAL	OO TFLOOD	99	0000	0101509	+504431	H	2	17099	L	83112608	000000	000000	082200	000044	G	B=254
PHCAL	OO TFLOOD	99	0000	0101509	+504431	H	2	17098	L	83112607	000000	000000	075600	000044	G	B=254
PHCAL	OO NULL	99	0000	0101509	+504431	H	2	17097	L	83112607	000000	000000	073100	000000	G	B=40
PHCAL	OO NULL	99	0000	0101509	+504431	H	2	17096	L	83112607	000000	000000	070500	000000	G	B=40
PHCAL	OO TFLOOD	99	0000	0101509	+504431	H	2	17095	L	83112606	000000	000000	063700	000022	G	B=237
PHCAL	OO TFLOOD	99	0000	0101509	+504431	H	2	17094	L	83112606	000000	000000	061200	000022	G	B=236
PHCAL	OO NULL	99	0000	0101509	+504431	H	2	17093	L	83112605	000000	000000	055700	000000	G	B=40
PHCAL	OO TFLOOD	99	0000	0101509	+504431	H	2	17092	L	83112605	000000	000000	052000	000022	G	B=235
PHCAL	OO TFLOOD	99	0000	0101509	+504431	H	2	17091	L	83112604	000000	000000	044300	000022	G	B=232
PHCAL	OO NULL	99	0000	0101509	+504431	H	2	17090	L	83112604	000000	000000	041700	000000	G	B=40
PHCAL	OO NULL	99	0000	0101509	+504431	H	2	17089	L	83112603	000000	000000	033600	000000	G	B=39
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17088	L	83112602	000000	000000	025100	000211	G	B=135
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17087	L	83112602	000000	000000	021000	000115	G	B=98
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17086	L	83112601	000000	000000	013100	000326	G	B=179
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17085	L	83112600	000000	000000	003300	000827	G	B=252
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17084	L	83112523	000000	000000	235700	000211	G	B=137
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17083	L	83112523	000000	000000	231600	000501	G	B=215
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17082	L	83112522	000000	000000	223700	000249	G	B=155
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17081	L	83112521	000000	000000	215600	000115	G	B=98
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17080	L	83112521	000000	000000	211600	000134	G	B=112
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17117	L	83112620	000000	000000	203800	000211	G	B=135
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17118	L	83112621	000000	000000	211600	000134	G	B=110
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17079	L	83112520	000000	000000	203700	000211	G	B=138
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17078	L	83112519	000000	000000	195300	000326	G	B=181
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17077	L	83112519	000000	000000	191100	000653	G	B=247
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17076	L	83112518	000000	000000	183100	000538	G	B=231
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17075	L	83112517	000000	000000	175200	000501	G	B=217
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17074	L	83112517	000000	000000	171100	000211	G	B=138
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17073	L	83112516	000000	000000	163000	000423	G	B=204
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17072	L	83112515	000000	000000	155400	000134	G	B=113
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17071	L	83112515	000000	000000	150900	000827	G	B=252
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17070	L	83112514	000000	000000	143000	000538	G	B=228
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17119	L	83112621	000000	000000	215400	000115	G	B=96
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17120	L	83112622	000000	000000	222900	000501	G	B=212
PHCAL	OO UVFLOOD	99	0000	0101509	+504431	H	2	17069	L	83112513	000000	000000	135300	000211	G	B=135
PHCAL	OO UVFLOOD	99	0000	0101509	+504431	H	2	17068	L	83112513	000000	000000	130500	000037	G	B=70
PHCAL	OO UVFLOOD	99	0000	0101509	+504431	H	2	17067	L	83112512	000000	000000	122600	000134	G	B=113
PHCAL	OO UVFLOOD	99	0000	0101509	+504431	H	2	17066	L	83112511	000000	000000	114000	000326	G	B=174
PHCAL	OO UVFLOOD	99	0000	0101509	+504431	H	2	17065	L	83112510	000000	000000	104500	000211	G	B=134
PHCAL	OO NULL	99	0000	0101509	+504431	L	2	17064	L	83112509	000000	000000	092500	000000	G	B=41
PHCAL	OO NULL	99	0000	0101509	+504431	L	2	17063	L	83112509	000000	000000	090500	000000	G	B=41

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
PHCAL	00	NULL	99	0000	0101509	+504431	L	2	17062	L	83112508	000000	000000	083100	000000	G	B=41
PHCAL	00UV	FLOOD	99	0000	0101509	+504431	H	2	17121	L	83112623	000000	000000	230900	000423	G	B=200
PHCAL	00UV	FLOOD	99	0000	0101509	+504431	H	2	17122	L	83112623	000000	000000	234900	000211	G	B=135
PHCAL	00UV	FLOOD	99	0000	0101509	+504431	H	2	17123	L	83112700	000000	000000	003100	000037	G	B=68
PHCAL	00UV	FLOOD	99	0000	0101509	+504431	H	2	17124	L	83112701	000000	000000	011600	000211	G	B=132
PHCAL	00	NULL	99	0000	0101509	+504431	L	2	17061	L	83112508	000000	000000	081000	000000	G	B=40
PHCAL	00	NULL	99	0000	0101509	+504431	L	2	17060	L	83112507	000000	000000	074600	000000	G	B=42
PHCAL	00	NULL	99	0000	0101509	+504431	L	2	17059	L	83112507	000000	000000	072600	000000	G	B=41
PHCAL	HD	6300	21	0650	0101509	+504431	L	2	17058	L	83112506	000000	000000	064300	000026	G	C=187,B=25
PHCAL	HD	6300	21	0650	0101509	+504431	L	2	17057	L	83112506	000000	000000	060500	000034	G	C=220,B=27
PHCAL	HD	6300	21	0650	0101509	+504431	L	2	17056	L	83112505	000000	000000	052800	000016	G	C=140,B=26
PHCAL	HD	6300	21	0650	0101509	+504431	L	2	17055	L	83112504	000000	000000	044900	000008	G	C=102,B=25
PHCAL	00	NULL	99	0000	0101509	+504431	H	2	17133	L	83112705	000000	000000	055200	000000	G	B=39
PHCAL	00	NULL	99	0000	0101509	+504431	H	2	17132	L	83112705	000000	000000	052900	000000	G	B=38
PHCAL	HD	6300	21	0650	0101509	+504431	L	2	17054	L	83112504	000000	000000	041200	000026	G	C=180,B=25
PHCAL	HD	6300	21	0650	0101509	+504431	L	2	17053	L	83112503	000000	000000	032400	000022	G	C=168,B=25
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17052	L	83112502	000000	000000	024200	000000	G	B=41
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17051	L	83112502	000000	000000	021300	000211	G	B=138
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17050	L	83112501	000000	000000	013500	000115	G	B=100
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17049	L	83112500	000000	000000	005200	000653	G	B=246
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17048	L	83112500	000000	000000	001500	000249	G	B=158
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17047	L	83112423	000000	000000	232500	000211	G	B=138
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17046	L	83112422	000000	000000	224500	000423	G	B=203
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17045	L	83112422	000000	000000	220400	000211	G	B=139
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17044	L	83112421	000000	000000	212200	000538	G	B=229
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17043	L	83112420	000000	000000	204700	000037	G	B=70
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17042	L	83112420	000000	000000	200200	000249	G	B=159
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17041	L	83112419	000000	000000	190100	000211	G	B=140
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17040	L	83112418	000000	000000	181700	000501	G	B=224
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17039	L	83112417	000000	000000	172900	000827	G	B=252
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17038	L	83112416	000000	000000	165300	000326	G	B=176
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17037	L	83112416	000000	000000	161600	000115	G	B=100
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17036	L	83112415	000000	000000	153800	000211	G	B=138
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17035	L	83112415	000000	000000	150100	000134	G	B=189
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17034	L	83112414	000000	000000	142300	000037	G	B=71
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17033	L	83112413	000000	000000	134300	000423	G	B=205
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17032	L	83112413	000000	000000	130600	000211	G	B=140
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17031	L	83112412	000000	000000	122000	000653	G	B=246
PHCAL	00	UVFLOOD	99	0000	0101509	+504431	H	2	17030	L	83112411	000000	000000	113000	000211	G	B=137
PHCAL	00	NULL	99	9999	0101509	+504431	H	2	17029	L	83112410	000000	000000	104500	000000	G	B=40
PHCAL	00	NULL	99	0000	0101509	+504431	H	2	17125	L	83112701	000000	000000	014300	000000	G	B=41
PHCAL	00	TFLOOD	99	0000	0101509	+504431	H	2	17131	L	83112705	000000	000000	050400	000044	G	B=254
PHCAL	00	TFLOOD	99	0000	0101509	+504431	H	2	17130	L	83112704	000000	000000	043700	000044	G	B=254
PHCAL	00	TFLOOD	99	0000	0101509	+504431	H	2	17129	L	83112704	000000	000000	041000	000000	G	B=39
PHCAL	00	TFLOOD	99	0000	0101509	+504431	H	2	17128	L	83112703	000000	000000	033500	000044	G	B=254

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
PHCAL	OO TFLOOD	99	0000	0101509	+504431	H	2	17127	L	83112703	000000	000000	030300	000044		G B=158
PHCAL	OO NULL	99	0000	0101509	+504431	H	2	17126	L	83112702	000000	000000	021000	000000		G B=41
PHCAL	OOUV FLOOD	99	0000	0101509	+504431	H	2	17116	L	83112619	000000	000000	194300	000653		G B=245
FA179	HD6619	30	0674	0104063	-355540	L	3	20736	L	83082100	000000	000000	005158	000225	500	V
FA179	HD6619	30	0680	0104063	-355540	L	2	16635	L	83082101	000000	000000	010225	000230	502	V TRAIL R=.133 1 PASS
FA009	HD6870	31	0762	0106057	-620817	L	3	21334	LS	83102317	171738	000500	170912	000500	400	V 300$
FA009	HD6870	31	0767	0106057	-620817	L	1	02117	L	83102316	000000	000000	163208	000200	702	V
FA009	HD6870	31	0767	0106057	-620817	L	1	02118	L	83102317	000000	000000	174329	000120	502	V
FC053	HD6860	49	0224	0106555	352122	H	3	20962	L	83090715	000000	000000	151729	036000	343	V
FC053	HD6860	49	0220	0106555	352122	H	2	16750	L	83090714	000000	000000	144550	002500	363	V
PHCAL	OOSKY BKGD	07	0000	0106558	+352119	H	2	16879	L	83092622	000000	000000	224800	020500		G B=52
PHCAL	OO NULL	99	0000	0106558	+352119		2	16878	L	83092622	000000	000000	222400	000000		G B=20
LGFJL	OO WAVCAL	98	9999	0106558	+352119	H	3	21177	S	83092706	060500	000018	000000	000000		G E=7-8X,B=110 TFLOO
LGFJL	HD 6860	49	0210	0106559	+352120	H	3	21176	L	83092701	000000	000000	010400	093000		G E=2-3X,C=195,B=187
LGFJL	HD 6860	49	0210	0106559	+352120	H	2	16875	L	83092606	000000	000000	063600	018000		G E=25X,C=220,B=60
LGFJL	OO WAVCAL	98	9999	0106559	+352120	H	2	16876	S	83092610	101700	000016	000000	000000		G E=50X,B=115 TFLOO
LGFJL	HD 6860	49	0210	0106559	+352120	L	3	21174	L	83092610	000000	000000	102900	007500		G E=3X,C=1.5,B=240
LGFJL	HD 6860	49	0210	0106559	+352120	H	2	16877	L	83092611	000000	000000	115000	000500		G E=197,B=40
LGFJL	OO WAVCAL	98	9999	0106559	+352120	H	3	21175	S	83092612	122500	000018	000000	000000		G E=8X,B=112 TFLOO
LGFJL	HD 6860	49	0210	0106559	+352120	D	9	01471	L	83092613	000000	000000	133600	002000		G NO COMMENTS
CVFJP	OO HT CAS	54	1650	0107050	+594839	L	3	21080	L	83091721	000000	000000	215900	038000		G E=111,C=95,B=75
CCFLH	HD 7570	41	0490	0112559	-454753	H	1	02203	L	83110306	000000	000000	064300	003000		G E=101,C=2.5X,B=52
RSFTS	HD 7672	45	0540	0114038	-024547	L	3	21598	L	83112104	000000	000000	044500	006000		G E=216,C=180,B=100
RSFTS	HD 7672	45	0540	0114038	-024547	H	1	02356	L	83120603	000000	000000	032300	001500		G E=187,C=100,B=32
RSFTS	HD 7672	45	0540	0114038	-024547	H	1	02480	L	83122404	000000	000000	040300	001500		G E=179,C=105,B=38
RSFTS	HD 7672	45	0540	0114038	-024547	L	3	21860	L	83122404	000000	000000	042400	006000		G E=178,C=143,B=65
RSFTS	HD 7672	45	0540	0114038	-024547	L	3	21697	L	83120602	000000	000000	021700	006000		G E=182,C=115,B=32
RSFTS	HD 7672	45	0540	0114038	-024547	H	1	02304	L	83112105	000000	000000	055000	001500		G E=225,C=140,B=82
MLFPC	OO AV492	23	1270	0115559	-732741	L	3	20965	L	83090809	000000	000000	094800	001800		G C=140,B=20
MLFPC	OO AV492	23	1270	0115559	-732741	L	2	16753	L	83090809	000000	000000	092200	001500		G C=170,B=27
EHFEJ	OOSKY BKGD	07	9999	0119265	-011805	L	1	02348	L	83120221	000000	000000	210400	027500		G B=121
FM185	0119-013	85	9999	0119265	-011805	D	9	01501	2	83120316	000000	000000	162500	016000		V FES REF FOR SWP 21675
EHFEJ	Q 0119-013	85	1520	0119300	-011800	L	3	21664	L	83120220	000000	000000	205900	030000		G E=189,C=150,B=108
EHFEJ	Q 0119-013	85	1520	0119300	-011800	L	3	21676	L	83120321	000000	000000	210300	028600		G E=169,C=150,B=108
EHFEJ	OOSKY BKGD	07	9999	0119300	-011800	L	1	02350	L	83120320	000000	000000	203900	053700		G B=122
EHFEJ	Q 0119-013	85	1520	0119300	-011800	L	3	21675	L	83120315	000000	000000	152700	030000		G E=148,C=107,B=61
FE052	ESO113	84	1431	0121512	-590358	L	3	21260	L	83100916	000000	000000	165413	005000	252	V 4+46 MIN,START 16:54:13
FE052	ESO 113	84	1438	0121512	-590358	L	3	21286	L	83101315	000000	000000	150459	012000	361	V
FE052	ESO113	84	1420	0121512	-590358	L	1	02021	L	83100920	000000	000000	204907	005800	342	V
FE052	ESO113	84	1420	0121512	-590358	L	1	02020	L	83100917	000000	000000	175641	005000	342	V
FE052	ESO113	84	1441	0121512	-590358	L	3	21287	L	83101319	000000	000000	191549	009000	351	V
FE052	ESO 113	84	1441	0121512	-590358	L	1	02037	L	83101317	000000	000000	171128	012000	460	V
FE052	ESO113	84	1420	0121512	-590358	L	3	21261	L	83100918	000000	000000	185042	011500	362	V
FE052	NULL IMAGE	99	9999	0121512	-590358	L	2	16974		83101300	000000	000000	000000	000000		V
FE052	ESO113	84	1457	0121512	-590358	L	1	02038	L	83101320	000000	000000	204936	004800	340	V

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
CVFPS	OO TY PSC	54	1400	0122504	+320735	L	3	21016	L	83091107	000000	000000	070200	018000	G	C=160,B=118
CVFPS	OO TY PSC	54	1400	0122504	+320735	L	2	16767	L	83091110	000000	000000	100700	012000	G	C=154,B=83
AFFJL	HD 8723	40	0540	0123332	+185446	L	3	21541	L	83111409	000000	000000	093600	012000	G	C=20X,B=80
AFFJL	HD 8723	40	0540	0123332	+185446	H	1	02265	L	83111409	000000	000000	091000	001500	G	E=133,C=240,B=70
AFFJL	HD 8799	41	0480	0124392	+450858	H	1	02264	L	83111406	000000	000000	062900	001500	G	E=104,C=1.5X,B=45
AFFJL	HD 8799	41	0480	0124392	+450858	L	3	21540	L	83111406	000000	000000	065000	009000	G	E=187,C=10X,B=100
EGFKD	OOM33 NUC	83	0000	0131016	+302414	L	1	02293	L	83111903	000000	000000	031500	004500	G	C=132,B=102
EGFKD	OOM33 NUC	83	0000	0131017	+302415	L	1	02299	L	83112000	000000	000000	005100	007000	G	C=160,B=114
EGFKD	OOM33 NUC	83	0000	0131017	+302415	L	1	02292	L	83111901	000000	000000	012900	007500	G	C=145,B=108
EGFKD	OOM33 NUC	83	0000	0131017	+302415	L	3	21574	L	83111821	000000	000000	212500	024000	G	C=105,B=67
EGFKD	OOM33 NUC	83	0000	0131017	+302415	L	1	02300	L	83112002	000000	000000	023000	006500	G	C=200,B=159
EGFKD	OOM33 NUC	83	0000	0131017	+302415	L	3	21582	L	83111920	000000	000000	204700	024000	G	C=120,B=75
MGFLH	HD 9562	44	0576	0131117	-071648	H	1	02298	L	83110301	000000	000000	014500	008000	G	E=110,C=1.5X,B=58
PHCAL	OO WAVCAL	98	0000	0133049	+540000	H	1	02128	S	83102412	122900	000016	000000	000000	G	E=50X,B=105 TFLO
PHCAL	OO WAVCAL	98	0000	0133049	+540000	L	3	21344	S	83102410	103700	000002	000000	000000	G	E=10X,B=103 TFLO
PHCAL	OO WAVCAL	98	0000	0133049	+540000	H	1	02127	S	83102411	114500	000016	000000	000000	G	E=50X,B=105 TFLO
PHCAL	OO WAVCAL	98	0000	0133049	+540000	L	1	02126	S	83102411	111600	000001	000000	000000	G	E=10X,B=103 TFLO
PHCAL	OO WAVCAL	98	0000	0133049	+540000	H	3	21345	S	83102411	110200	000200	000000	000000	G	E=50X,B=132 TFLO
ZAFNO	OO AX PER	57	1050	0133050	+540000	L	1	02125	L	83102409	000000	000000	093300	001400	G	E=238,C=185,B=141
ZAFNO	OO AX PER	57	1050	0133050	+540000	H	3	21443	L	83110321	000000	000000	213500	034000	G	E=4X,C=75,B=73
ZAFNO	OO AX PER	57	1050	0133050	+540000	L	3	21442	L	83110320	000000	000000	203800	003000	G	E=176,C=42,B=25
ZAFNO	OO AX PER	57	1050	0133050	+540000	L	1	02210	L	83110403	000000	000000	032100	002500	G	E=233,C=100,B=41
ZAFNO	OO AX PER	57	1050	0133050	+540000	L	3	21343	L	83102409	000000	000000	090000	002000	G	E=174,C=125,B=99
ZAFNO	OO AX PER	57	1050	0133050	+540000	L	2	16629	L	83082014	000000	000000	145900	001700	G	E=144,C=80,B=30
ZAFNO	OO AX PER	57	1050	0133050	+540000	L	3	20729	L	83082014	000000	000000	142700	002500	G	E=196,C=44,B=30
NPFLA	OO M1-1	70	1410	0134129	+501257	L	3	21420	L	83103122	000000	000000	222200	016500	G	E=3X,C=75,B=42
FA144	HD10144	26	0052	0135512	-572925	H	2	16868	L	83092421	000000	000000	213536	000005	602	V
FA144	HD10144	26	0061	0135512	-572925	H	3	21156	S	83092420	205509	000005	000000	000000	501	V
FSFBH	OO UV CETI	48	1160	0136249	-181241	L	3	21233	L	83100423	000000	000000	233500	002000	G	B=18
FC254	GL 65-AB	48	1153	0136250	-181242	L	2	16942	L	83100717	000000	000000	174700	000000	133	V 3EXP.2 AT 25,1 AT 20 MIN
FSFMG	OO UV CET	48	1290	0136327	-181222	L	3	21338	L	83102322	000000	000000	225800	006000	G	E=93,B=31
FSFMG	OO UV CET	48	1290	0136327	-181222	L	3	21352	L	83102505	000000	000000	050200	004500	G	B=60
FSFMG	OO UV CET	48	1290	0136327	-181222	L	1	02121	L	83102400	000000	000000	001000	002500	G	E=104,B=35
FSFMG	OO UV CET	48	1290	0136327	-181222	L	3	21349	L	83102423	000000	000000	230400	006000	G	B=24
FSFMG	OO UV CET	48	1290	0136327	-181222	L	1	02134	L	83102504	000000	000000	043100	002200	G	E=127,B=64
FSFMG	OO UV CET	48	1290	0136328	-181222	L	3	21341	L	83102405	000000	000000	051600	003000	G	B=34
HSFES	OOTON S227	28	1180	0141280	-242012	H	3	21362	L	83102523	000000	000000	232800	021000	G	C=220,B=75
MGFLH	HD 10700	44	0350	0141447	-161201	H	1	02224	L	83110510	000000	000000	101600	002000	G	E=251,C=2X,B=61
FA179	HD11031	30	0622	0146086	473856	L	3	20734	L	83082021	000000	000000	215815	000301	500	V TRAIL R=0.11 1 PASS
FA179	HD11031	30	0623	0146086	473856	L	2	16633	L	83082022	000000	000000	222543	000106	502	V TRAIL R=.3 1 PASS
FA042	GD1404	28	1248	0146250	-265106	L	1	02104	L	83102117	000000	000000	175546	001000	512	V
FA042	GD1404	28	1249	0146250	-265106	L	3	21322	L	83102118	000000	000000	181354	001500	710	V
FA027	SB744	28	1249	0146253	-265105	L	2	16495	L	83080100	000000	000000	003027	001300	502	V
FA027	SB744	28	1252	0146253	-265105	L	3	20558	L	83080100	000000	000000	000142	000800	501	V
FA042	GD1072	17	1460	0200382	-124325	L	1	02105	L	83102119	000000	000000	193938	012700	414	V

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
MLFJL	HD 12533	47	0210	0200492	+420527	H	2	16573	L	83081116	000000	000000	163700	000600		G E=113,C=150,B=31
MLFJL	HD 12533	47	0210	0200492	+420527	H	2	16574	L	83081117	000000	000000	171400	003000		G E=2X,C=3X,B=52
QSFRR	OO MRK1018	84	1400	0203426	-003147	L	3	21793	L	83121803	000000	000000	035300	005000		G E=132,C=165,B=130
QSFRR	OO MRK1018	84	1400	0203426	-003147	L	3	21796	L	83121807	000000	000000	075700	011000		G E=157,C=160,B=127
FI145	TT ARI	54	1600	0204100	150327	L	1	02383	L	83121014	000000	000000	145530	016200	343	V
FI145	NULL	99	9999	0204100	150327	L	1	02382		83121000	000000	000000	000000	000000		V NULL READ FOR LWP2383
FI145	TT ARI	54	1600	0204100	150327	L	3	21742	L	83121010	000000	000000	105024	024000	502	V
QSFRM	OONAB 0205	85	1540	0205145	+022842	L	2	16679	L	83082711	000000	000000	114900	005000		G C=1.1X,B=180
PHCAL	OO NULL	99	0000	0206393	+565711	L	2	16780	L	83091302	000000	000000	021300	000000		G B=20
CVFPS	OO UV PER	54	1500	0206394	+565712	L	3	21031	L	83091300	000000	000000	004900	021500		G E=91,C=70,B=50
CVFPS	OO UV PER	54	1500	0206394	+565712	L	2	16781	L	83091306	000000	000000	064400	006500		G B=40
SCFMA	OOCOM1983L	06	1000	0209550	-035911	L	2	16751	L	83090723	000000	000000	231900	031000		G C=115,B=52
SCFMA	OOCOM1983L	06	1000	0210160	-035237	D	9	01469	L	83090723	000000	000000	232900	016000		G NO COMMENTS
SCFMA	OOCOM1983L	06	1000	0210160	-035237	D	9	01470	L	83090800	000000	000000	003600	004000		G NO COMMENTS
FE162	MKN1027	88	9999	0211284	045624	L	3	21604	L	83112113	000000	000000	132318	038400	303	V
OBFBS	HD 14053	23	0840	0214526	+564645	L	3	21710	L	83120707	000000	000000	075400	000330		G C=190,B=23
OBFBS	HD 14053	23	0840	0214526	+564645	L	2	17175	SL	83120707	074300	000400	073400	000110		G C=195,B=35
OBFBS	HD 14052	23	0820	0214564	+565842	L	3	21709	L	83120706	000000	000000	061900	000400		G C=200,B=22
OBFBS	HD 14052	23	0820	0214564	+565842	L	2	17174	SL	83120705	060700	000330	055900	000110		G C=208,B=30
OBFBS	BD+56 0502	20	0930	0215012	+565846	L	2	17173	L	83120704	000000	000000	042600	000330		G C=210,B=25
OBFBS	BD+56 0502	20	0930	0215012	+565846	L	3	21708	L	83120705	000000	000000	050100	001000		G C=190,B=20
FE182	NULL	99	9999	0215141	013100	L	1	02398		83121217	000000	000000	174000	000000		V G-1 CUTOFF LWP 2399
FE182	0215 +15	85	1500	0215141	013100	L	1	02399	L	83121211	000000	000000	110948	038700	305	V
OBFBS	BD+56 0511	24	0910	0215167	+565011	L	2	17172	SL	83120702	030000	001600	024600	000530		G C=1.5X,B=26
OBFBS	BD+56 0511	24	0910	0215167	+565011	L	3	21707	L	83120703	000000	000000	033100	002100		G C=1.5X,B=22
OBFBS	HD 14357	23	0850	0217384	+563809	L	2	17176	SL	83120708	090700	000600	085900	000200		G C=200,B=28
OBFBS	HD 14357	23	0850	0217384	+563809	L	3	21711	L	83120709	000000	000000	091900	000800		G C=190,B=18
EHFEJ	HD 14422	29	0850	0218169	+570930	L	3	21657	L	83120205	000000	000000	050900	002000		G C=180,B=83
EHFEJ	HD 14422	29	0850	0218169	+570930	L	3	21673	L	83120308	000000	000000	083400	001320		G C=130,B=75
EHFEJ	HD 14422	29	0850	0218169	+570930	L	3	21656	L	83120203	000000	000000	035100	001020		G C=85,B=32
EHFEJ	HD 14422	29	0850	0218169	+570930	L	3	21672	L	83120307	000000	000000	074700	000640		G C=110,B=72
AFFNM	HD 14489	32	0160	0218512	+553706	L	3	21812	L	83121918	000000	000000	183200	000200		G C=215,B=21
AFFNM	HD 14489	32	0160	0218512	+553706	H	2	16763	L	83091004	000000	000000	040200	002000		G C=220,B=33
AFFNM	HD 14489	32	0517	0218512	+553706	H	1	02436	L	83121922	000000	000000	223200	009000		G C=6X,B=87
AFFNM	HD 14489	32	0517	0218512	+553706	H	3	21813	L	83121919	000000	000000	193000	017400		G C=2X,B=73
AFFNM	HD 14489	32	0517	0218512	+553706	H	1	02435	L	83121919	000000	000000	190200	002000		G C=1.3X,B=48
AFFNM	HD 14489	32	0160	0218512	+553706	H	3	21814	L	83122000	000000	000000	000600	009000		G C=225,B=61
FM185	0219+428	85	9999	0219300	424829	E	9	01500	2	83120215	000000	000000	151000	016000		V FES REF. FOR SWP21663
EHFEJ	OOSKY BKGD	07	0000	0219300	424829	L	1	02347	L	83120211	000000	000000	113300	044000		G B=83
FM185	0219+428	85	1550	0219300	424829	L	3	21662	L	83120210	000000	000000	102702	024000	312	V
EHFEJ	OO0219+428	85	1550	0219300	+424829	L	3	21663	L	83120214	000000	000000	145000	030000		G C=100,B=66
FM185	SKY BGD	07	9999	0219300	424830	L	1	02349	L	83120310	000000	000000	101149	024000	003	V SKY BGD FOR SWP21674
FM185	0219+428	85	1550	0219300	424830	L	3	21674	L	83120310	000000	000000	100950	024000	312	V
MLFCG	HD 14633	12	0750	0219464	+411511	H	3	21583	L	83112004	000000	000000	040500	001400		G C=255,B=60
OBFGS	HD 15371	21	0425	0225090	-475538	H	3	21002	L	83091010	000000	000000	102500	000230		G C=1.5X,B=43

PRG	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
OBFGS	HD 15371	21	0425	0225090	-475538	H	3	21046	L	83091406	000000	000000	061500	000215		G C=240,B=40
HSFCW	HD 15318	25	0428	0225297	+081412	L	3	21834	L	83122107	000000	000000	075600	000012		G C=180,B=26
HSFCW	HD 15318	25	0428	0225297	+081412	L	1	02509	L	83122707	000000	000000	070100	000019		G C=9X,B=40
HSFCW	HD 15318	25	0428	0225297	+081412	L	3	21835	L	83122109	000000	000000	091200	000013		G C=178,B=25
HSFCW	HD 15318	25	0428	0225297	+081412	L	1	02456	L	83122107	000000	000000	074800	000007		G C=200,B=38
HSFCW	HD 15318	25	0428	0225297	+081412	L	1	02457	L	83122109	000000	000000	090300	000007		G C=200,B=35
HSFCW	HD 15318	25	0428	0225297	+081412	L	3	21893	L	83122707	000000	000000	070700	000019		G C=230,B=25
OD08K	OOFEIGE 24	37	1240	0232309	+033051	H	3	20614	L	83080502	000000	000000	024600	018000		G C=142,B=55
OD08K	OOFEIGE 24	37	1240	0232309	+033051	H	2	16527	L	83080505	000000	000000	055300	023700		G C=170,B=72
FE073	NULL	99	9999	0237162	385054	L	1	02421		83121600	000000	000000	000000	000000		V
FE073	NGC1023	80	1192	0237162	385054	L	2	17184	L	83121611	000000	000000	112626	037400	309	V GDE(362,-631) 782 FO
QSFDW	NG 1068	84	1330	0240069	-001330	L	3	21734	L	83120919	000000	000000	192700	024000		G E=135,C=115,B=71
QSFDW	NG 1068	84	1330	0240069	-001330	L	3	21751	L	83121118	000000	000000	184000	043000		G C=123,B=70
FE137	NGC1068	84	1118	0240071	-001331	L	3	21772	L	83121415	000000	000000	153130	006000	231	V
FE137	NGC1068	84	1117	0240071	-001331	L	1	02413	L	83121416	000000	000000	164248	006400	561	V
FA085	LB3275	28	1402	0241230	-632926	L	1	01992	L	83091915	000000	000000	152344	002700	402	V
FA085	LB3275	28	1402	0241230	-632926	L	3	21099	L	83091914	000000	000000	145900	001900	400	V
FA179	HD17138	30	0647	0244228	692533	L	3	20735	L	83082022	000000	000000	233416	000100	500	V
FA179	HD17138	30	0646	0244228	692533	L	2	16634	L	83082023	000000	000000	233845	000117	502	V TRAIL R=.26 1 PASS
QSFRR	OO MRK 372	84	1500	0246308	+190553	L	3	21792	L	83121800	000000	000000	005600	013000		G C=235,B=188
MPFJK	PK 1-26	70	9999	0255098	-442220	L	3	21421	L	83110102	000000	000000	024000	001500		G C=110,B=19
OD91B	OOP136+5.1	70	1500	0259319	+644257	L	3	21015	L	83091023	000000	000000	235700	027000		G C=160,B=68
PHCAL	OOSKY BKGD	07	9999	0259319	+644257	H	2	16766	L	83091101	000000	000000	013200	015000		G B=32
PHCAL	OOSKY BKGD	07	9999	0259319	+644257	H	2	16765	L	83091022	000000	000000	223900	015000		G B=38
OD91B	OOP136+5.1	70	1500	0259319	+644257	L	3	21014	L	83091022	000000	000000	223200	006000		G C=60,B=24
GHFLH	OO 53 ARI	20	0610	0304365	+174118	H	2	16509	L	83080312	000000	000000	122500	000500		G C=220,B=35
GHFLH	OO 53 ARI	20	0610	0304365	+174118	H	3	20594	L	83080312	000000	000000	121400	000530		G C=202,B=35
FI043	HD19356	22	0230	0304544	404552	H	1	02228	L	83110515	000000	000000	154918	000020	502	V
FI043	HD19356	22	0257	0304544	404552	H	3	21456	L	83110518	000000	000000	181157	000030	501	V
FI043	HD19356	22	0232	0304544	404552	H	3	21455	L	83110516	000000	000000	164324	000040	601	V
FI043	HD19356	22	0302	0304544	404552	H	3	21458	L	83110519	000000	000000	194425	000100	501	V
FI043	HD19356	22	0284	0304544	404552	H	3	21457	L	83110519	000000	000000	190900	000100	501	V
FI043	HD19356	22	0232	0304544	404552	H	3	21453	L	83110514	000000	000000	144446	000100	601	V
FI043	HD19356	22	0230	0304544	404552	H	3	21454	L	83110515	000000	000000	154516	000050	601	V
FI043	HD19356	22	0221	0304544	404552	H	3	21452	L	83110513	000000	000000	133554	000130	702	V
FI043	HD19356	22	0226	0304544	404552	H	1	02227	L	83110514	000000	000000	144905	000040	702	V
FI043	HD19356	22	0287	0304544	404552	H	1	02231	L	83110519	000000	000000	191313	000040	501	V
FI043	HD19356	22	0259	0304544	404552	H	1	02230	L	83110518	000000	000000	181533	000020	502	V
FI043	HD19356	22	0234	0304544	404552	H	1	02229	L	83110516	000000	000000	164728	000020	502	V
FI043	HD19356	22	0236	0304544	404552	H	1	02226	L	83110513	000000	000000	134045	000100	702	V
CSFHJ	HD 19557	50	0810	0307335	+574253	L	1	02513	L	83122806	000000	000000	062200	007500		G C=150,B=84
FE223	NGC1275	84	1300	0316299	411950	L	3	21248	L	83100619	000000	000000	193259	013400	331	V
CVFCW	OO GK PER	55	1000	0327475	434403	L	3	20717	L	83081916	000000	000000	163200	005300		G
CVFCW	OO GK PER	55	1100	0327475	+434403	L	2	16625	L	83081917	000000	000000	173300	001600		G C=205,B=23
CVFCW	OOGK PER	55	1310	0327476	+434404	L	1	02110	L	83102303	000000	000000	033900	012500		G E=173,C=142,B=80

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
CVFCW	OOGK	PER	55	1310	0327476	+434404	L	3	21326	L	83102223	000000	000000	230000	027000		G E=75,C=85,B=60
CVFCW	OOGK	PER	55	1310	0327476	+434404	L	3	20653	L	83081010	000000	000000	104500	005900		G E=224,C=160,B=27
CVFCW	OOGK	PER	55	1310	0327476	+434404	L	2	16563	L	83081011	000000	000000	115000	001000		G C=210,B=25
CVFPS	OO	AF CAM	54	1500	0328144	+583713	L	3	21057	L	83091422	000000	000000	222300	024000		G B=45
HEFDB	HD	21699	27	0550	0328359	+475117	H	3	21081	L	83091806	000000	000000	063600	000700		G C=1.3X,B=45
HEFSS	HD	21699	27	0550	0328359	+475116	H	3	21133	L	83092213	000000	000000	134000	000700		G C=255,B=72
HEFSS	HD	21699	27	0550	0328359	+475116	H	3	21132	L	83092213	000000	000000	130300	000700		G C=220,B=100
HEFSS	HD	21699	27	0550	0328359	+475116	L	2	16847	L	83092212	000000	000000	121600	000003		G C=220,B=25
HEFDB	HD	21699	27	0550	0328359	+475117	L	2	16818	L	83091807	000000	000000	070100	000003		G C=200,B=25
HEFSS	HD	21699	27	0550	0328359	+475116	L	3	21131	L	83092212	000000	000000	121100	000005		G C=200,B=15
HEFDB	HD	21699	27	0550	0328359	+475117	L	3	21082	L	83091807	000000	000000	073200	000005		G C=185,B=20
HEFSS	HD	21699	27	0550	0328359	+475116	H	3	21127	L	83092207	000000	000000	073700	000700		G C=255,B=25
HEFSS	HD	21699	27	0550	0328359	+475116	L	2	16843	L	83092206	000000	000000	063400	000003		G C=200,B=25
HEFSS	HD	21699	27	0550	0328359	+475116	L	3	21126	L	83092206	000000	000000	062900	000005		G C=195,B=18
HEFSS	HD	21699	21	0550	0328359	+475116	H	3	21123	L	83092113	000000	000000	134100	000700		G C=1.2X,B=73
HEFDB	HD	21699	27	0550	0328359	+475117	L	3	21095	L	83091910	000000	000000	103100	000005		G C=185,B=15
HEFSS	HD	21699	21	0550	0328359	+475116	H	2	16840	L	83092113	000000	000000	130700	000315		G C=225,B=50
HEFSS	HD	21699	21	0550	0328359	+475116	L	2	16839	L	83092112	000000	000000	120900	000003		G C=190,B=25
HEFDB	HD	21699	27	0550	0328359	+475117	L	2	16827	L	83091910	000000	000000	103600	000003		G C=185,B=25
HEFDB	HD	21699	27	0550	0328359	+475117	H	3	21096	L	83091911	000000	000000	110900	000700		G C=250,B=50
HEFDB	HD	21699	27	0550	0328359	+475117	L	2	16832	L	83092012	000000	000000	123200	000003		G C=220,B=27
HEFDB	HD	21699	27	0550	0328359	+475117	L	3	21109	L	83092012	000000	000000	123600	000005		G C=200,B=15
HEFDB	HD	21699	27	0550	0328359	+475117	H	3	21110	L	83092013	000000	000000	133900	000700		G B=60
HEFSS	HD	21699	23	0550	0328359	+475116	L	3	21117	L	83092106	000000	000000	064600	000005		G C=195,B=17
HEFSS	HD	21699	23	0550	0328359	+475116	L	2	16835	L	83092106	000000	000000	065100	000003		G C=190,B=21
HEFSS	HD	21699	23	0550	0328359	+475116	H	3	21118	L	83092107	000000	000000	075400	000700		G C=255,B=50
HEFSS	HD	21699	21	0550	0328359	+475116	L	3	21122	L	83092112	000000	000000	120100	000005		G C=190,B=17
FM079	HD21856		20	0606	0329285	351736	H	3	20970	L	83090815	000000	000000	151622	000540	501	V
MGFLH	HD	22049	46	0370	0330344	-093735	H	1	02338	L	83113011	000000	000000	113900	000500		G C=100,B=37
MGFLH	HD	22049	46	0370	0330344	-093735	H	1	02337	L	83113010	000000	000000	101600	000500		G E=202,C=120,B=34
MGFLH	HD	22049	46	0370	0330344	-093735	L	3	21644	L	83113009	000000	000000	092500	004000		G E=108,C=65,B=34
MGFLH	HD	22049	46	0370	0330344	-093735	H	1	02336	L	83113008	000000	000000	085200	000500		G E=191,C=120,B=40
MGFLH	HD	22049	46	0370	0330344	-093735	L	3	21643	L	83113008	000000	000000	080100	004000		G E=124,C=90,B=52
MGFLH	HD	22049	46	0370	0330344	-093735	H	1	02335	L	83113007	000000	000000	072800	000500		G E=199,C=130,B=40
MGFLH	HD	22049	46	0370	0330344	-093735	L	3	21642	L	83113006	000000	000000	063900	004000		G E=116,C=85,B=53
MGFLH	HD	22049	46	0370	0330344	-093735	H	1	02334	L	83113006	000000	000000	060400	000500		G E=214,C=120,B=39
MGFLH	HD	22049	46	0370	0330344	-093735	L	3	21641	L	83113005	000000	000000	051200	004000		G E=118,C=70,B=32
MGFLH	HD	22049	46	0370	0330344	-093735	H	1	02333	L	83113004	000000	000000	045900	000500		G E=200,C=115,B=39
MGFLH	HD	22049	46	0370	0330344	-093735	H	1	02225	L	83110511	000000	000000	113600	000600		G E=224,C=140,B=37
MGFLH	HD	22049	46	0370	0330344	-093735	L	3	21645	L	83113010	000000	000000	104800	004000		G E=93,C=60,B=30
FC225	HD22049		46	0406	0330344	-093735	E	9	01475	2	83092900	000000	000000	000000	016000		V TARGET SWLA,GUIDE X=-1250
CSFTA	HD	22049	46	0370	0330344	-093735	H	3	21192	L	83093003	000000	000000	030800	053000		G E=2X,C=180,B=102
CSFTA	OO	WAVECAL	98	9999	0330344	-093735	H	3	21193	S	83093005	050000	000018	000000	000000		G E=8X,B=111 TFLOO
BEFPB	HD	22780	26	0560	0337521	+372513	H	3	20846	L	83083012	000000	000000	123600	000645		G C=180,B=35
NPFLA	OO	M1-4	70	1400	0337591	+520726	L	2	16869	L	83092502	000000	000000	023800	003045		G B=30

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
NPFLA	OO M1-4	70	1400	0337591	+520726	L	3	21157	L	83092500	000000	000000	000200	015000		G B=35
IGFJS	HD 22928	24	0300	0339211	+473746	H	2	16518	L	83080415	000000	000000	150600	000026		G C=225,B=30
IGFJS	HD 22928	24	0300	0339211	+473746	H	3	20604	L	83080415	000000	000000	150100	000035		G C=198,B=35
IGFJS	HD 23180	23	0380	0341100	+320753	H	3	20605	L	83080416	000000	000000	160800	000110		G C=180,B=32
IGFJS	HD 23180	23	0380	0341100	+320753	H	2	16519	L	83080416	000000	000000	161300	000040		G C=190,B=32
HCFSP	HD 23089	39	0160	0341387	+631122	H	2	16814	L	83091711	000000	000000	115400	001300		G C=230,B=135
HCFSP	HD 23089	39	0160	0341387	+631122	H	1	02470	L	83122301	000000	000000	012600	002500		G C=1.2X,B=50
GHFLH	OO 29 TAU	21	0530	0343008	+055342	H	2	16501	L	83080210	000000	000000	104100	000400		G C=240,B=35
GHFLH	OO 29 TAU	21	0530	0343008	+055342	H	3	20582	L	83080210	000000	000000	103300	000500		G C=225,B=40
NPFLA	OO 351	70	1240	0344202	+345335	L	3	21158	L	83092503	000000	000000	034300	012000		G E=4X,C=110,B=20
GHFLH	OO 30 TAU	21	0510	0345315	+105928	H	2	16502	L	83080211	000000	000000	114300	000320		G C=1.3X,B=35
GHFLH	OO 30 TAU	21	0510	0345315	+105928	H	3	20583	L	83080211	000000	000000	113600	000310		G C=220,B=40
BEFPB	HD 24131	26	0580	0348415	+341236	H	3	20845	L	83083011	000000	000000	115800	000600		G C=255,B=40
FI158	XPER	59	0657	0352151	305401	L	3	20722	L	83082000	000000	000000	001431	000123	600	V
FI158	XPER	59	0655	0352151	305401	L	3	20724	L	83082001	000000	000000	012839	000107	500	V
FI158	XPER	59	0650	0352151	305401	L	3	20723	L	83082000	000000	000000	005135	000107	500	V
FA183	HZ 4	37	1449	0352380	093834	L	1	02476	L	83122315	000000	000000	155902	010800	403	V
FA183	HZ4	37	1457	0352380	093834	L	1	02489	L	83122510	000000	000000	105229	013200	503	V
FA183	HZ 4	37	1490	0352380	093834	L	1	02458	L	83122111	000000	000000	114458	012000	504	V
FA183	HZ 4	37	1490	0352380	093834	L	3	21836	L	83122110	000000	000000	104011	006000	300	V B.O. FROM STAR A;ST.CALB
PHCAL	HD24760	23	0287	0354294	395203	L	1	01989	L	83090219	000000	000000	191415	000000	503	V TRAILED,RATE=51.28,ITER=1
IGFJS	HD 24912	13	0400	0355428	+353808	H	3	20606	L	83080417	000000	000000	171100	000040		G C=160,B=30
IGFJS	HD 24912	13	0400	0355428	+353808	H	2	16520	L	83080417	000000	000000	171400	000032		G C=200,B=35
IGFJS	HD 24912	13	0400	0355428	+353808	H	3	20607	L	83080417	000000	000000	174000	000055		G C=180,B=27
FA255	HD24912	12	0413	0355430	353900	H	3	21069	L	83091521	000000	000000	211833	000100	500	V
FA255	HD24912	12	0413	0355430	353900	H	3	20989	L	83090916	000000	000000	161156	000100	500	V
FA255	HD24912	12	0414	0355430	353900	H	3	21064	L	83091514	000000	000000	143240	000100	500	V
FA255	HD24912	12	0414	0355430	353900	H	3	21039	L	83091319	000000	000000	194821	000100	551	V
GHFLH	OO 40 TAU	21	0530	0401054	+051757	H	3	20595	L	83080313	000000	000000	132900	000430		G C=200,B=35
GHFLH	OO 40 TAU	21	0530	0401054	+051757	H	2	16510	L	83080313	000000	000000	133700	000420		G C=250,B=35
CSFHJ	HD 25408	50	0790	0401315	+613933	L	1	02510	L	83122718	000000	000000	185100	018000		G E=204,C=90,B=60
QSFBW	PK0405-123	85	0000	0405274	-121932	L	2	16975	L	83101322	000000	000000	225700	002600		G C=80,B=29
QSFCW	PK0405-123	85	1480	0405274	-121932	L	3	21459	L	83110521	000000	000000	211500	039000		G E=2X,C=190,B=94
QSFBW	PK0405-123	85	0000	0405274	-121932	L	3	21288	L	83101323	000000	000000	235900	022000		G E=1.2X,C=150,B=32
QSFBW	PK0405-123	85	0000	0405274	-121932	L	2	16978	L	83101422	000000	000000	225900	021500		G E=223,C=200,B=45
QSFBW	PK0405-123	85	0000	0405274	-121932	L	3	21296	L	83101502	000000	000000	023600	019500		G E=247,C=160,B=45
QSFCW	PK0405-123	85	1480	0405274	-121932	L	1	02247	L	83110923	000000	000000	230000	028500		G C=210,B=100
QSFCW	PK0405-123	85	1480	0405274	-121932	L	3	21497	L	83110921	000000	000000	211700	009000		G E=148,C=75,B=25
FA083	NGC1514	70	0970	0406083	303843	L	2	16514	L	83080322	000000	000000	221026	001500	612	V
FA183	LB227	37	1508	0406369	170004	L	3	21855	L	83122311	000000	000000	111204	025500	403	V
FA183	LB227	37	1508	0406369	170004	L	3	21872	L	83122513	000000	000000	135222	023500	401	V
FA183	LB227	37	1522	0406369	170004	L	3	21837	L	83122114	000000	000000	141558	021100	401	V B.O. FROM STAR A; ST. CAL
GHFLH	HD 26326	21	0530	0407015	-163059	H	3	20586	L	83080215	000000	000000	153800	000530		G C=1.3X,B=40
GHFLH	HD 26326	21	0530	0407015	-163059	H	2	16505	L	83080215	000000	000000	155000	000410		G C=1.3X,B=35
PHCAL	OO WAVCAL	98	0000	0407050	-120726	L	1	02249	S	83111005	053600	000001	000000	000000		G E=10X,B=105 TFLOO

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT	
PHCAL	UVFLOOD	99	9999	0407050	-120726	L	1	02248	L	83111004	000000	000000	044800	000204	G C=210,B=142	
PHCAL	OO WAVCAL	98	0000	0407050	-120726	H	1	02250	S	83111006	061200	000016	000000	000000	G E=50X,B=112	TFLOO
PHCAL	OO WAVCAL	98	0000	0407050	-120726	H	3	21499	S	83111006	070200	000200	000000	000000	G E=50X,B=127	TFLOO
PHCAL	OO WAVCAL	98	0000	0407050	-120726	L	3	21498	S	83111006	063300	000002	000000	000000	G E=10X,B=105	TFLOO
CSFJL	HD 283447	58	1070	0411072	+280441	L	1	02069	L	83101708	000000	000000	084100	001000	G E=70,C=55,B=40	
HCFSP	HD 26630	39	0070	0411130	+481704	L	2	16815	L	83091712	000000	000000	124700	000230	G C=1.5X,B=38	
FA010	NGC1535	70	1106	0411570	-125142	H	1	02165	L	83102819	000000	000000	195922	010800	332 V	
XGFGR	X 0412-080	84	1490	0412270	-080308	L	2	16610	L	83081708	000000	000000	085600	018000	G C=175,B=105	
MGFLH	HD 26913	44	0720	0412458	+060437	H	1	02218	L	83110420	000000	000000	205200	012080	G E=246,C=220,B=52	
FM079	HD26912	21	0441	0412490	084607	H	3	21012	L	83091019	000000	000000	195901	000315	601 V	
CSFJL	OOV410 TAU	58	1090	0415248	+282002	L	1	02063	L	83101611	000000	000000	113800	001500	G E=138,C=112,B=90	
CSFJL	OOV410 TAU	58	1090	0415248	+282002	L	1	02062	L	83101610	000000	000000	104500	001000	G C=145,B=112	
OD12K	OO BP TAU	58	1220	0416086	+285916	L	2	16972	L	83101311	000000	000000	111900	003000	G E=190,C=80,B=33	
OD12K	OO BP TAU	58	1220	0416086	+285916	L	2	16980	L	83101511	000000	000000	112700	002500	G E=177,C=110,B=50	
OD12K	OO BP TAU	58	1220	0416086	+285916	L	2	16945	L	83100808	000000	000000	081600	003000	G E=174,C=85,B=35	
OD12K	OO BP TAU	58	1220	0416086	+285916	L	2	16962	L	83101011	000000	000000	112300	003000	G C=110,B=48	
CSFJL	HD 283571	58	1080	0418508	+281934	L	1	02088	L	83102005	000000	000000	053200	001000	G E=149,C=73,B=42	
CSFJL	HD 283571	58	1080	0418508	+281934	L	1	02095	L	83102011	000000	000000	113800	001000	G E=179,C=101,B=69	
CSFJL	HD 283571	58	1080	0418508	+281934	L	3	21302	L	83101701	000000	000000	012200	030000	G E=171,C=88,B=65	
CSFJL	HD 283571	58	1080	0418508	+281934	L	1	02067	L	83101700	000000	000000	005500	001000	G E=167,C=61,B=35	
CSFJL	HD 283571	58	1080	0418508	+281934	L	1	02072	L	83101711	000000	000000	112800	001000	G E=194,C=70,B=40	
CSFJL	HD 283571	58	1080	0418508	+281934	L	1	02092	L	83102008	000000	000000	085800	001000	G E=187,C=119,B=86	
CSFJL	HD 283571	58	1080	0418508	+281934	L	1	02058	L	83101607	000000	000000	070400	002000	G E=1.5X,C=95,B=43	
CSFJL	HD 283571	58	1080	0418508	+281934	L	1	02064	L	83101612	000000	000000	123300	001000	G E=208,C=78,B=40	
CSFJL	HD 283571	58	1080	0418508	+281934	D	9	01486	L	83101705	000000	000000	053800	016000	G NO COMMENTS	
CSFJL	HD 283571	58	1080	0418508	+281934	L	1	02068	L	83101706	000000	000000	062800	009000	G E=6X,C=200,B=47	
CSFJL	HD 283571	58	1080	0418508	+281934	L	3	21305	S	83101801	013700	036000	000000	000000	G E=129,C=92,B=65	
CSFJL	HD 283571	58	1080	0418508	+281934	L	3	21307	L	83101819	000000	000000	192800	033000	G E=112,C=80,B=60	
CSFJL	HD 283571	58	1080	0418508	+281934	L	1	02082	L	83101909	000000	000000	094000	001000	G E=216,C=130,B=98	
CSFJL	HD 283571	58	1080	0418508	+281934	L	3	21310	L	83101919	000000	000000	190700	030000	G E=80,C=60,B=55	
CSFJL	HD 283571	58	1080	0418508	+281934	L	1	02074	L	83101801	000000	000000	010600	001000	G E=163,C=63,B=35	
FC150	HD283571	58	1026	0418509	281935	L	1	02079	L	83101819	000000	000000	190248	001000	342 V	
FC150	HD283571	58	1026	0418509	281935	L	1	02086	L	83101918	000000	000000	184724	001000	342 V	
FC150	HD283571	58	9999	0418509	281935	E	9	01490	2	83101820	000000	000000	200300	016000	V FES FOR SWP21307	
EC267	HD283571	58	1034	0418509	281935	L	1	02102	L	83102116	000000	000000	162621	001000	242 V	
FC150	HD283571	58	9999	0418509	281935	E	9	01492	2	83101900	000000	000000	000000	016000	V FES FOR SWP21310	
OD12K	HD 283572	58	0910	0418525	+281107	L	2	16946	SL	83100809	093900	001000	092300	001000	G C=105,B=31	
OD12K	HD 283572	58	0910	0418525	+281107	L	2	16971	L	83101310	000000	000000	102500	002000	G E=126,C=140,B=30	
OD12K	HD 283572	58	0910	0418525	+281107	L	2	16961	L	83101010	000000	000000	102500	002000	G E=214,C=190,B=37	
OD12K	HD 283572	58	0910	0418525	+281107	L	2	16979	L	83101510	000000	000000	104000	001730	G E=149,C=140,B=40	
CSFJL	HD 284419	58	1040	0419042	+192505	L	1	02084	L	83101911	000000	000000	112000	000700	G E=251,C=86,B=59	
CSFJL	HD 284419	58	1040	0419042	+192505	L	1	02076	L	83101810	000000	000000	103000	001000	G E=255,C=80,B=50	
CSFJL	HD 284419	58	1040	0419042	+192505	L	1	02094	L	83102010	000000	000000	104700	000700	G E=250,C=112,B=82	
CSFJL	HD 284419	58	1040	0419042	+192505	L	1	02090	L	83102007	000000	000000	072000	000700	G E=223,C=10,B=44	
CSFJL	HD 284419	58	1040	0419042	+192505	L	1	02061	L	83101609	000000	000000	094300	001000	G E=1.5X,C=145,B=105	

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
CCFMZ	OO VA 276	46	1050	0420340	+153854	L	2	16606	L	83081612	000000	000000	125300	006000		G C=165,B=100
CCFMZ	OO VA 276	46	1050	0420340	+153854	H	2	16577	L	83081214	000000	000000	142600	019500		G B=75
QSFBW	PK0405-123	85	0000	0420585	+241110	L	2	16976	L	83101403	000000	000000	034300	012200		G C=150,B=40
IMFTS	HD 27778	21	0620	0420586	+241111	H	1	02024	L	83101007	000000	000000	070300	001500		G C=225,B=48
IMFTS	HD 27778	21	0620	0420586	+241111	H	3	21297	L	83101506	000000	000000	063000	004000		G C=173,B=40
IMFTS	HD 27778	21	0620	0420586	+241111	H	1	02045	L	83101507	000000	000000	072100	001300		G C=182,B=43
IMFTS	HD 27778	21	0620	0420586	+241111	H	3	21265	L	83101007	000000	000000	073600	003500		G C=165,B=44
IMFTS	HD 27778	21	0620	0420586	+241111	H	3	21264	L	83101006	000000	000000	062700	003000		G C=165,B=40
IMFTS	HD 27778	21	0620	0420586	+241111	H	3	21298	L	83101507	000000	000000	075100	004000		G C=198,B=43
IMFTS	HD 27778	21	0620	0420586	+241111	H	1	02025	L	83101008	000000	000000	081700	001400		G C=220,B=52
IMFTS	HD 27778	21	0620	0420586	+241111	H	3	21266	L	83101008	000000	000000	085000	003500		G C=205,B=62
IMFTS	HD 27778	21	0620	0420586	+241111	H	1	02026	L	83101009	000000	000000	093100	001300		G C=220,B=61
IMFTS	HD 27778	21	0620	0420586	+241111	H	1	02034	L	83101306	000000	000000	065400	001300		G C=180,B=45
IMFTS	HD 27778	21	0620	0420586	+241111	H	3	21284	L	83101307	000000	000000	071600	004000		G C=180,B=38
IMFTS	HD 27778	21	0620	0420586	+241111	H	3	21289	L	83101406	000000	000000	062700	004000		G C=175,B=40
IMFTS	HD 27778	21	0620	0420586	+241111	H	1	02039	L	83101407	000000	000000	072500	001300		G C=180,B=43
IMFTS	HD 27778	21	0620	0420586	+241111	H	3	21290	L	83101408	000000	000000	080000	004000		G C=195,B=48
IMFTS	HD 27778	21	0620	0420586	+241111	H	1	02040	L	83101408	000000	000000	084600	001300		G C=190,B=50
IMFTS	HD 27778	21	0620	0420586	+241111	H	3	21285	L	83101308	000000	000000	083900	004000		G C=190,B=42
IMFTS	HD 27778	21	0620	0420586	+241111	H	3	21291	L	83101409	000000	000000	091700	003500		G C=190,B=60
IMFTS	HD 27778	21	0620	0420586	+241111	H	1	02035	L	83101308	000000	000000	080400	001300		G C=180,B=45
IMFTS	HD 27778	21	0620	0420586	+241111	H	3	21292	L	83101410	000000	000000	102800	003500		G C=210,B=70
IMFTS	HD 27778	21	0620	0420586	+241111	H	1	02041	L	83101409	000000	000000	095800	001300		G C=200,B=60
IMFTS	HD 27778	21	0620	0420586	+241111	H	1	02036	L	83101309	000000	000000	093000	001300		G C=185,B=50
CCFMZ	BD+16 0592	44	0780	0421359	+164620	L	2	16607	L	83081614	000000	000000	143400	003700		G C=3X,B=82
CCFMZ	OO VA 334	48	1160	0421560	+154541	L	2	16616	L	83081808	000000	000000	083200	007500		G E=126,C=98,B=52
CCFMZ	OO VA 334	48	1160	0421560	+154541	L	2	16615	L	83081802	000000	000000	024700	030000		G E=1.5X,C=100,B=60
CCFMZ	BD+17 0718	46	0900	0422540	+175418	L	3	20704	L	83081602	000000	000000	023200	044700		G C=210,B=120
CCFMZ	BD+17 0718	46	0900	0422540	+175418	H	2	16608	L	83081615	000000	000000	155000	011500		G E=150,C=140,B=100
CCFMZ	OO VA 500	46	1090	0425590	+161048	L	2	16605	L	83081610	000000	000000	101500	012000		G E=240,C=168,B=105
HEFDB	HD 28843	27	0590	0430072	-031851	H	3	21098	L	83091913	000000	000000	131200	000900		G C=1.5X,B=50
PHCAL	OOSKY BKGD	07	0000	0430314	+051458	H	2	16873	L	83092523	000000	000000	234900	019000		G B=45
PHCAL	OO NULL	99	0000	0430314	+051458	H	2	16872	L	83092523	000000	000000	232600	000000		G B=24
FE176	3C120	84	1440	0430315	051500	L	2	16609	L	83081623	000000	000000	231933	014400	345	V
FE176	3C120	84	1440	0430315	051500	L	3	20705	L	83081618	000000	000000	182640	027000	342	V
QSFJO	OO 3C120	84	0000	0430315	+051459	L	2	16874	L	83092603	000000	000000	033100	013500		G E=165,C=130,B=42
QSFJO	OO 3C120	84	0000	0430315	+051459	L	3	21173	L	83092522	000000	000000	225700	027000		G E=179,C=140,B=69
FE176	3C120	84	1465	0430316	051500	L	3	21419	L	83103116	000000	000000	163248	017700	341	V
CCFMZ	BD+14 0721	46	0850	0431080	+150337	L	3	20666	L	83081202	000000	000000	025400	048000		G E=129,C=120,B=82
CCFMZ	BD+14 0721	46	0850	0431080	+150337	H	2	16576	L	83081211	000000	000000	110100	016500		G E=130,C=120,B=55
OD12K	OO DN TAU	58	1250	0432255	+240852	L	2	16973	L	83101312	000000	000000	122400	007500		G E=111,C=68,B=36
OD12K	OO DN TAU	58	1250	0432255	+240852	L	2	16963	L	83101012	000000	000000	122500	007500		G E=162,C=100,B=46
OD12K	OO DN TAU	58	1250	0432255	+240852	L	2	16944	L	83100806	000000	000000	065300	005000		G E=122,C=60,B=36
OD12K	OO DN TAU	58	1250	0432255	+240852	L	2	16981	L	83101512	000000	000000	122300	007500		G E=133,C=83,B=40
HCFSP	HD 29094	39	0090	0433131	+410951	L	3	21603	L	83112111	000000	000000	113900	000110		G C=185,B=16

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
HCFSP	HD 29094	39	0090	0433131	+410951	H	1	02307	L	83112110	000000	000000	105300	004200		G C=1.3X,B=61
HCFSP	HD 29094	39	0090	0433131	+410951	L	3	21602	L	83112110	000000	000000	104600	000110		G C=200,B=15
BEFPB	HD 30076	26	0590	0441410	-083544	H	3	20844	L	83083011	000000	000000	111300	000600		G C=190,B=35
CSFJL	00 DR TAU	58	1150	0444140	+165300	L	1	02065	L	83101613	000000	000000	132400	001000		G E=160,C=110,B=35
EC267	DR TAU	58	1013	0444140	165300	L	1	02103	L	83102116	000000	000000	163100	001000	332	V
CSFJL	00 DR TAU	58	1150	0444140	+165300	L	1	02096	L	83102012	000000	000000	123100	007500		G E=5-6X,C=2-3X,B=90
CSFJL	00 DR TAU	58	1150	0444140	+165300	D	9	01484	L	83101613	000000	000000	131500	016000		G NO COMMENTS
CSFJL	00 DR TAU	58	1150	0444140	+165300	L	1	02070	L	83101709	000000	000000	094700	001000		G E=160,C=128,B=60
CSFJL	00 DR TAU	58	1150	0444140	+165300	L	3	21304	L	83101718	000000	000000	184100	036000		G E=158,C=180,B=70
CSFJL	00 DR TAU	58	1150	0444140	+165300	L	1	02091	L	83102008	000000	000000	080900	001000		G E=147,C=120,B=60
CSFJL	00 DR TAU	58	1150	0444140	+165300	L	1	02059	L	83101608	000000	000000	080200	001000		G E=146,C=110,B=45
CSFJL	00 DR TAU	58	1150	0444140	+165300	L	3	21311	L	83102000	000000	000000	005900	024000		G E=162,C=195,B=115
CSFJL	00 DR TAU	58	1150	0444140	+165300	L	1	02077	L	83101811	000000	000000	112600	001000		G E=169,C=120,B=41
FC150	DR TAU	58	1126	0444140	165300	L	1	02073	L	83101718	000000	000000	181854	001000	342	V
CSFJL	00 DR TAU	58	1150	0444140	+165300	L	1	02087	L	83102000	000000	000000	003200	001000		G E=124,C=95,B=45
FC150	DR TAU	58	9999	0444140	165300	E	9	01488	2	83101718	000000	000000	184158	016000		V FES FOR SWP21304
CSFJL	00 DR TAU	58	1150	0444140	+165300	L	1	02083	L	83101910	000000	000000	103000	001000		G E=186,C=165,B=100
EC267	DR TAU	58	1132	0444140	165300	L	3	21300	L	83101613	000000	000000	134054	030000	532	V
CSFJL	00 DR TAU	58	1150	0444140	+165300	L	1	02080	L	83101901	000000	000000	013300	001000		G E=145,C=105,B=35
CSFJL	00 DR TAU	58	0920	0444140	+165300	L	3	21308	L	83101902	000000	000000	020500	036000		G E=221,C=1.3X,B=160
LBFAS	HD 31295	36	0460	0452085	+100422	H	3	21318	L	83102108	000000	000000	084400	001500		G C=2X,B=125
LBFAS	HD 31295	36	0460	0452085	+100422	H	1	02098	L	83102109	000000	000000	090500	000700		G C=2X,B=98
FC150	HD282624	58	0938	0452478	302920	L	3	21309	L	83101912	000000	000000	125230	030000	332	V
EC267	HD282624	58	0951	0452478	302920	L	1	02101	L	83102114	000000	000000	143353	001000	332	V
EC267	SU AUR	58	0950	0452478	302919	L	1	02066	L	83101619	000000	000000	190254	001000	332	V
EC267	SU/AUR	00	9999	0452478	302119	E	9	01485	2	83101619	000000	000000	193023	016000		V
CSFJL	HD 282624	58	0920	0452481	+302920	D	9	01491	S	83101911	115900	016000	000000	000000		G NO COMMENTS
CSFJL	HD 282624	58	0920	0452481	+302920	L	3	21301	L	83101619	000000	000000	193000	030000		G E=90,C=67,B=54
FC150	HD282624	58	0943	0452481	302920	L	3	21306	L	83101813	000000	000000	130934	031500	332	V
FC150	SU AUR	58	0944	0452481	302920	L	3	21303	L	83101711	000000	000000	115610	033000	332	V
CSFJL	HD 282624	58	0920	0452481	+302920	L	1	02089	L	83102006	000000	000000	063000	001000		G E=223,C=70,B=44
CSFJL	HD 282624	58	0920	0452481	+302920	L	1	02060	L	83101608	000000	000000	085300	001000		G E=145,C=130,B=68
CSFJL	HD 282624	58	0920	0452481	+302920	L	1	02085	L	83101912	000000	000000	120800	001000		G E=133,C=108,B=45
CSFJL	HD 282624	58	0920	0452481	+302920	L	1	02078	L	83101812	000000	000000	125100	001200		G E=127,C=110,B=35
CSFJL	HD 282624	58	0920	0452481	+302920	D	9	01489	L	83101811	000000	000000	114900	016000		G NO COMMENTS
CSFJL	HD 282624	58	0920	0452481	+302920	L	1	02075	L	83101807	000000	000000	075600	009000		G E=6X,C=4X,B=90
CSFJL	HD 282624	58	0920	0452481	+302920	L	1	02071	L	83101710	000000	000000	103700	001000		G E=126,C=120,B=58
CSFJL	HD 282624	58	0920	0452481	+302920	L	1	02081	L	83101908	000000	000000	084400	001000		G E=137,C=115,B=59
CSFJL	HD 282624	58	0920	0452481	+302920	L	1	02093	L	83102009	000000	000000	094700	001000		G E=178,C=170,B=115
CSFJL	HD 282624	58	0920	0452481	+302920	D	9	01487	L	83101711	000000	000000	114700	016000		G NO COMMENTS
IMFTS	HD 31327	23	0610	0452595	+360526	H	3	21279	L	83101211	000000	000000	114600	004500		G C=178,B=68
IMFTS	HD 31327	23	0610	0452595	+360526	H	1	02032	L	83101212	000000	000000	123700	001500		G C=198,B=60
IMFTS	HD 31327	23	0610	0452595	+360526	L	3	21278	L	83101210	000000	000000	100200	000107		G C=85,B=20
IMFTS	HD 31327	23	0610	0452595	+360526	H	3	21280	L	83101213	000000	000000	131100	003600		G C=125,B=35
IMFTS	HD 31327	23	0610	0452595	+360526	L	1	02031	SL	83101210	104700	000012	103800	000044		G C=190,B=43

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
GHFLH	HD 31726	20	0610	0455273	-141827	H	2	16504	L	83080214	000000	000000	143700	000310		G C=205,B=35
GHFLH	HD 31726	20	0610	0455273	-141827	H	3	20585	L	83080214	000000	000000	142600	000340		G C=223,B=37
HSFBS	HD 31726	20	0610	0455273	-141827	H	3	21681	L	83120407	000000	000000	073000	000215		G C=165,B=37
CCFFF	HD 31738	44	0780	0455433	+002244	L	3	21475	L	83110801	000000	000000	010500	018000		G E=134,C=125,B=52
FSFBH	OO GL 182	48	0960	0456589	+014235	L	2	16913	L	83100313	000000	000000	130500	002400		G E=74,C=30,B=30
RSFJL	OO GL 182	48	1030	0456589	+014235	D	9	01482	L	83100511	000000	000000	111200	016000		G NO COMMENTS
FSFBH	OO GL 182	48	1030	0456589	+014235	_	2	16929	L	83100511	000000	000000	113000	003900		G E=107,B=35
FSFBH	OO GL 182	48	1020	0456599	+014235	L	2	16924	L	83100421	000000	000000	214800	003900		G E=105,C=65,B=30
FC254	GL182	48	9999	0457000	014236	E	9	01481	2	83100421	000000	000000	210900	016000		V FIELD FOR LWR16924
FC254	GL182	48	1027	0457000	014236	L	3	21232	L	83100418	000000	000000	185956	000000	221	V 2 EXP IN LAP 60MIN EACH
FC254	GL 182	48	1026	0457000	014236	L	3	21221	L	83100316	000000	000000	165846	000000	101	V 2 EXP. IN LAP,60 & 45 MIN
FC254	GL182	48	1019	0457000	014236	L	2	16914	L	83100315	000000	000000	155540	000000	233	V 3EXPOSURES IN LAP,15MIN E
FC254	GL182	48	1026	0457000	014236	L	3	21238	L	83100512	000000	000000	122522	000000	342	V 2EXP. 60MIN EACH RP(-
FC254	GL182	48	1026	0457000	014236	L	3	21231	L	83100415	000000	000000	154612	000000	231	V 2 EXP. IN LAP,60 MIN EACH
FC254	GL182	48	1031	0457000	014236	L	3	21220	L	83100314	000000	000000	140920	000000	100	V 3 EXP. IN LAP,30MIN EACH
FC254	GL182	48	1031	0457000	014236	L	2	16923	L	83100417	000000	000000	175520	000000	232	V 3 EXP IN LAP,13MIN EACH
CBFMP	OORS CEP	66	1000	0457120	+801100	L	3	21432	L	83110209	000000	000000	090400	004000		G C=180,B=41
FC029	HD31964	40	0403	0458220	434505	H	2	16553	L	83080823	000000	000000	232250	001500	502	V
FC029	HD31964	40	0403	0458220	434505	L	3	20644	LS	83080822	223726	000630	222909	000430	500	V 300$
FC029	HD31964	40	0401	0458220	434505	L	2	16552	LS	83080821	214014	000630	213115	000430	702	V 702$
FC029	HD31964	40	0402	0458220	434505	L	2	16551	LS	83080820	205024	000050	204720	000027	602	V 602$
FC029	HD31964	40	0404	0458220	434505	L	3	20643	L	83080820	000000	000000	205400	003300	730	V
FI101	HD31964	33	0405	0458225	434505	L	3	20703	LS	83081600	014153	000600	002426	006700	701	V 301$
FI101	HD31964	33	0407	0458225	434505	H	2	16603	L	83081519	000000	000000	193127	012000	775	V
VVFRC	HD 31964	39	0300	0458225	+434505	L	2	16586	L	83081404	000000	000000	040100	000020		G E=197,C=190,B=25
VVFDL	BS 1605	33	0300	0458225	+434530	H	2	17167	L	83112907	000000	000000	074000	001000		G E=59,C=135,B=33
VVFRC	HD 31964	39	0300	0458225	+434505	H	2	16585	L	83081402	000000	000000	024800	002000		G E=83,C=240,B=32
VVFRC	HD 31964	39	0300	0458225	+434505	L	3	20686	L	83081402	000000	000000	023700	000600		G C=240,B=17
VVFRC	HD 31964	39	9999	0458225	+434505	H	3	20687	L	83081403	000000	000000	031600	038000		G HISTORY REPLAY
FI101	HD31964	33	0406	0458225	434505	L	2	16604	LS	83081523	234357	001000	234026	000025	602	V 802$
VVFDL	BS 1605	33	0300	0458225	+434530	L	3	21636	L	83112906	000000	000000	064800	000500		G C=155,B=23
VVFDL	BS 1605	33	0300	0458225	+434530	L	2	16857	SL	83092406	061800	000300	061100	000022		G C=215,B=28
VVFDL	BS 1605	33	0300	0458225	+434530	L	3	21144	L	83092406	000000	000000	062600	006000		G E=162,C=10X,B=65
VVFDL	BS 1605	33	0300	0458225	+434530	L	2	16858	L	83092407	000000	000000	070100	000400		G C=10X,B=25
FI101	HD31964	33	0405	0458225	434505	H	2	16602	L	83081518	000000	000000	183648	002000	602	V
VVFDL	BS 1605	33	0300	0458225	+434530	L	2	17164	L	83112904	000000	000000	044400	000022		G C=195,B=25
VVFDL	BS 1605	33	0300	0458225	+434530	L	2	17165	L	83112905	000000	000000	053100	000400		G C=8X,B=25
VVFDL	BS 1605	33	0300	0458225	+434530	H	2	17166	L	83112906	000000	000000	061400	004500		G E=159,C=3X,B=52
VVFDL	BS 1605	33	0300	0458225	+434530	H	2	16859	L	83092407	000000	000000	074400	004500		G E=208,C=3X,B=100
FI101	HD31964	33	0403	0458225	434505	L	3	20701	L	83081519	000000	000000	190110	002000	731	V
VVFDL	BS 1605	33	0300	0458225	+434530	L	3	21635	L	83112904	000000	000000	045200	006500		G E=118,C=8-10X,B=33
FI101	HD31964	33	0404	0458225	434505	H	3	20702	L	83081521	000000	000000	213600	012000	521	V
VVFDL	BS 1605	33	0300	0458225	+434530	L	3	21146	L	83092409	000000	000000	093900	001200		G E=84,C=1.7X,B=70
VVFDL	BS 1605	33	0300	0458225	+434530	H	2	16860	L	83092409	000000	000000	091500	001500		G E=107,C=210,B=60
VVFDL	BS 1605	33	0300	0458225	+434530	L	3	21145	L	83092408	000000	000000	081900	000500		G C=180,B=25

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
VVFTA	OO EPS AUR	40	0300	0458226	+434505	L	3	20840	L	83082915	000000	000000	155900	006000		G E=115,C=10X,B=25
VVFTA	OO EPS AUR	40	0300	0458226	+434505	H	2	17194	L	83122408	000000	000000	083500	006000		G E=177,C=3X,B=42
VVFTA	OO EPS AUR	40	0300	0458226	+434505	H	2	17193	L	83122407	000000	000000	074200	001500		G E=80,C=200,B=30
VVFTA	OO EPS AUR	40	0300	0458226	+434505	L	3	21862	L	83122407	000000	000000	070200	006500		G E=136,C=8X,B=55
VVFTA	OO EPS AUR	40	0300	0458226	+434505	L	2	17192	SL	83122406	063500	000600	063000	000022		G 6X,B=27
VVFTA	OO EPS AUR	40	0300	0458226	+434505	L	2	16696	L	83082916	000000	000000	163100	000400		G C=12X,B=26
VVFTA	OO EPS AUR	40	0300	0458226	+434505	L	2	16694	SL	83082914	145200	000400	144700	000020		G C=200,B=32
VVFTA	OO EPS AUR	40	0300	0458226	+434505	H	2	16697	L	83082917	000000	000000	171400	003400		G C=1.8X,B=40
VVFTA	OO EPS AUR	40	0300	0458226	+434505	L	3	21861	L	83122406	000000	000000	062100	000500		G C=180,B=35
VVFTA	OO EPS AUR	40	0300	0458226	+434505	L	3	20839	L	83082915	000000	000000	150200	000430		G C=200,B=32
VVFTA	OO EPS AUR	40	0300	0458226	+434505	H	2	16695	L	83082915	000000	000000	153200	001500		G C=215,B=40
OD19K	OOZETA AUR	39	0380	0458586	+410017	H	3	21692	L	83120507	000000	000000	071200	001000		G C=200,B=44
OD19K	OOZETA AUR	39	0380	0458586	+410017	H	1	02352	L	83120507	000000	000000	070000	000500		G E=193,C=200,B=51
VVFIA	HD 32068	39	0380	0458587	+410018	H	2	16861	L	83092410	000000	000000	104800	000545		G E=185,C=200,B=52
VVFIA	HD 32068	39	0380	0458587	+410018	H	3	21148	L	83092411	000000	000000	111700	000545		G C=165,B=72
VVFIA	HD 32068	39	0380	0458587	+410018	H	2	16687	L	83082812	000000	000000	122000	000515		G E=214,C=200,B=59
VVFIA	HD 32068	39	0380	0458587	+410018	H	1	02159	L	83102810	000000	000000	105100	000405		G E=189,C=183,B=50
VVFIA	HD 32068	39	0380	0458587	+410018	H	1	02160	L	83102811	000000	000000	113200	000500		G E=214,C=200,B=48
VVFIA	HD 32068	39	0380	0458587	+410018	H	3	21147	L	83092410	000000	000000	102600	000545		G C=160,B=60
VVFIA	HD 32068	39	0380	0458587	+410018	H	3	20824	L	83082813	000000	000000	132900	000500		G C=210,B=120
VVFIA	HD 32068	39	0380	0458587	+410018	H	3	21386	L	83102811	000000	000000	114800	001130		G C=210,B=44
VVFIA	HD 32068	39	0380	0458587	+410018	H	3	20823	L	83082812	000000	000000	124400	000600		G C=210,B=106
FC201	HD32918	47	0840	0459504	-752059	L	1	02272	L	83111518	000000	000000	180130	001000	461	V
FC201	HD32918	47	0844	0459504	-752059	L	3	21593	L	83112013	000000	000000	134225	022000	242	V
FC201	HD32918	47	0843	0459504	-752059	L	1	02301	LS	83112012	174900	000800	123315	001800	572	V 342$
FC201	HD32918	47	0841	0459504	-752059	L	3	21549	L	83111517	000000	000000	172415	010600	231	V
FC201	HD32918	47	0840	0459504	-752059	H	1	02273	L	83111518	000000	000000	185119	001000	031	V
FC201	HD32918	47	0840	0459504	-752059	L	1	02271	L	83111516	000000	000000	165938	002000	571	V
HSFCW	OOG 191B2B	16	1180	0501315	+524552	L	1	02439	L	83122005	000000	000000	054500	000303		G C=210,B=40
HSFCW	OOG 191B2B	16	1180	0501315	+524552	L	1	02441	L	83122007	000000	000000	074200	000730		G C=2X,B=40
HSFCW	OOG 191B2B	37	1180	0501315	+524552	L	1	02451	SL	83122101	014000	000606	012600	000730		G C=2.3X,B=38
HSFCW	OOG 191B2B	16	1180	0501315	+524552	L	3	21817	L	83122006	000000	000000	062400	000134		G C=195,B=15
HSFCW	OOG 191B2B	16	1180	0501315	+524552	L	3	21819	L	83122008	000000	000000	084900	000548		G C=205,B=18
HSFCW	OOG 191B2B	16	1180	0501315	+524552	L	1	02442	SL	83122009	092000	001248	091100	000303		G C=200,B=36
HSFCW	OOG 191B2B	37	1180	0501315	+524552	L	3	21829	SL	83122101	011300	000628	010400	000317		G C=2.3X,B=25
HSFCW	OOG 191B2B	16	1180	0501315	+524552	L	1	02440	L	83122006	000000	000000	065500	000303		G C=205,B=40
HSFCW	OOG 191B2B	16	1180	0501315	+524552	L	3	21818	L	83122007	000000	000000	073300	000317		G C=2.5X,B=17
GHFLH	HD 32612	20	0640	0501349	-142619	H	3	20588	L	83080217	000000	000000	173500	000630		G C=235,B=40
GHFLH	HD 32612	20	0640	0501349	-142619	H	3	20587	L	83080216	000000	000000	165200	000800		G C=1.3X,B=42
GHFLH	HD 32612	20	0640	0501349	-142619	H	2	16506	L	83080217	000000	000000	170600	000700		G C=1.3X,B=40
IMFRP	OO UX ORI	30	0870	0502009	-035123	L	1	02179	L	83103010	000000	000000	102000	001000		G C=220,B=85
PHCAL	HD32630	21	0329	0503002	411008	L	1	01988	L	83090218	000000	000000	182146	000000	502	V TRAILED,RATE=24.39,ITER=1
IGFJR	HD 32653	22	0780	0503304	+501424	H	3	21779	L	83121518	000000	000000	184900	008000		G C=165,B=40
MLFPC	OOSK-67038	12	1370	0503390	-675600	L	2	16742	L	83090608	000000	000000	084500	003000		G C=210,B=40
MLFPC	OOSK-67038	12	1370	0503390	-675600	L	3	20942	L	83090609	000000	000000	095600	003600		G C=240,B=47

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
MLFPC	OOSK-70057	12	1340	0504519	-704200	L	3	20966	L	83090810	000000	000000	105100	002800		G C=210,B=21
BEFPB	HD 32991	26	0590	0504559	+213826	H	3	21490	L	83110907	000000	000000	075200	001230		G C=170,B=48
BEFPB	HD 32990	26	0550	0505036	+241203	H	3	21489	L	83110907	000000	000000	071200	000730		G C=185,B=35
IGFJR	HD 33002	22	0810	0506053	+533850	H	3	21727	L	83120903	000000	000000	031700	007000		G C=215,B=120
FA255	HD33328	26	0429	0506450	-084900	H	3	20990	L	83090916	000000	000000	165412	000048	501	V
BEFPB	HD 33328	26	0430	0506451	-084900	H	3	20843	L	83083010	000000	000000	103600	000045		G C=200,B=32
BEFPB	HD 33328	26	0520	0506451	-084900	H	3	21908	L	83123003	000000	000000	030000	000045		G C=210,B=36
BEFPB	HD 33328	26	0430	0506451	-084900	H	3	21493	L	83110910	000000	000000	102400	000045		G C=200,B=35
CCFTS	HD 33276	41	0480	0506501	+153206	L	3	21476	L	83110804	000000	000000	045500	002000		G E=108,C=5IX,B=16
IGFJR	HD 33852	22	0840	0512071	+515406	H	3	21728	L	83120904	000000	000000	045900	003800		G C=223,B=142
CSFTA	HD 34029	45	0010	0512595	+455658	H	2	16901	L	83093012	000000	000000	120000	000300		G E=3X,C=3X,B=55
CSFTA	HD 34029	45	0010	0512595	+455658	H	3	21200	L	83093012	000000	000000	120900	001500		G E=250,C=30X,B=140
CSFTA	HD 34029	45	0010	0512595	+455658	H	3	21201	L	83093013	000000	000000	130800	006000		G E=3-4X,C=3-4X,B=160
QSFWS	OOARAK 120	84	1410	0513378	-001215	L	2	16500	L	83080208	000000	000000	083400	007600		G E=203,C=150,B=35
QSFWS	OOARAK 120	84	1410	0513378	-001215	L	3	20581	L	83080206	000000	000000	065700	009000		G E=151,C=100,B=24
QSFWS	OOARAK 120	84	1440	0513379	-001215	L	3	21923	L	83123108	000000	000000	084400	006500		G E=118,C=90,B=27
QSFWS	OOARAK 120	84	1440	0513379	-001215	L	1	02533	L	83123107	000000	000000	072400	007500		G E=1.5X,C=220,B=52
LDFTA	OO CAP HL	48	0950	0513414	+454712	L	3	20926	L	83090423	000000	000000	232500	032000		G B=70
LDFTA	OO CAP HL	48	0950	0513414	+454712	L	2	16734	L	83090422	000000	000000	220300	007500		G E=132,C=72,B=32
HEFSS	HD 34452	23	0540	0515423	+334148	L	2	16844	L	83092208	000000	000000	082100	000003		G C=215,B=23
HEFSS	HD 34452	22	0540	0515423	+334148	L	2	16828	L	83091912	000000	000000	121900	000003		G C=195,B=25
HEFSS	HD 34452	23	0540	0515423	+334148	L	3	21128	L	83092208	000000	000000	081700	000005		G C=170,B=18
HEFSS	HD 34452	22	0540	0515423	+334148	L	2	16826	L	83091909	000000	000000	090700	000003		G C=90,B=25
HEFSS	HD 34452	22	0540	0515423	+334148	L	3	21094	L	83091909	000000	000000	091200	000005		G C=62,B=15
HEFSS	HD 34452	22	0540	0515423	+334148	L	3	21097	L	83091912	000000	000000	121500	000005		G C=170,B=15
HEFSS	HD 34452	27	0540	0515423	+334148	L	2	16836	L	83092108	000000	000000	084100	000003		G C=220,B=22
HEFSS	HD 34452	27	0540	0515423	+334148	L	3	21119	L	83092108	000000	000000	083700	000005		G C=180,B=18
OD14K	HD 34798	22	0620	0517057	-183414	H	2	17190	L	83121706	000000	000000	061100	000700		G C=220,B=65
OD14K	HD 34798	22	0620	0517057	-183414	H	3	21787	L	83121705	000000	000000	054100	000800		G C=235,B=85
OD14K	HD 34798	22	0620	0517057	-183414	L	2	17189	SL	83121705	050500	000015	051100	000015		G C=220,B=21
OD14K	HD 34798	22	0620	0517057	-183414	L	3	21786	SL	83121704	045700	000020	050100	000020		G C=1.5X,B=17
OD14K	HD 34797	27	0640	0517065	-183336	L	3	21785	SL	83121704	041700	000025	042500	000040		G C=135,B=17
OD14K	HD 34797	27	0640	0517065	-183336	H	2	17187	SL	83121701	010800	000010	010100	000020		G C=1.5X,B=26
OD14K	HD 34797	27	0640	0517065	-183336	H	3	21783	L	83121700	000000	000000	002100	001200		G C=155,B=42
OD14K	HD 34797	27	0640	0517065	-183336	H	2	17186	L	83121623	000000	000000	235100	001000		G C=190,B=38
PHCAL	OO LAM LEP	20	4290	0517160	-131337	H	1	02014	L	83100210	000000	000000	101900	000022		G NO COMMENTS
PHCAL	LAMBDA LEP	20	0422	0517160	-131357	H	1	02363	L	83120717	000000	000000	173934	000005	302	V
PHCAL	LAMBDA LEP	20	0423	0517160	-131357	H	3	21716	L	83120717	000000	000000	174207	000006	300	V
PHCAL	HD 34816	20	0430	0517162	-131337	H	1	01981	L	83081915	000000	000000	151000	000022		G C=220,B=43
PHCAL	HD 34816	20	0430	0517162	-131337	H	2	16906	L	83100112	000000	000000	122600	000026		G C=220,B=30
PHCAL	HD 34816	20	0430	0517162	-131337	L	3	21794	L	83121805	000000	000000	053900	000001		G C=220,B=17
PHCAL	HD 34816	20	0430	0517162	-131337	L	1	02425	L	83121805	000000	000000	053400	000001		G C=205,B=35
PHCAL	HD 34816	20	0430	0517162	-131337	H	3	20689	L	83081412	000000	000000	120400	000022		G C=200,B=32
PHCAL	HD 34816	20	0430	0517162	-131337	H	2	16588	L	83081412	000000	000000	120900	000026		G C=210,B=31
PHCAL	HD 34816	20	0430	0517162	-131337	H	2	17182	L	83121607	000000	000000	075600	000026		G C=210,B=32

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
PHCAL	HD 34816	20	0430	0517162	-131337	H	3	21207	L	83100112	000000	000000	123000	000022	G C=200,B=32
PHCAL	HD 34816	20	0430	0517162	-131337	H	2	17171	L	83112911	000000	000000	111700	000026	G C=180,B=33
PHCAL	HD 34816	20	0430	0517162	-131337	H	3	21650	L	83120106	000000	000000	063900	000022	G C=180,B=32
PHCAL	HD 34816	20	0430	0517162	-131337	H	1	02343	L	83120106	000000	000000	064300	000022	G C=210,B=43
OD16K	HD 35155	50	0680	0519547	-084246	L	3	20879	L	83090120	000000	000000	203700	006800	G E=164,C=85,B=20
OD16K	HD 35155	51	0680	0519548	-084247	L	2	16528	L	83080510	000000	000000	103000	000800	G E=141,C=28,B=25
OD16K	HD 35155	51	0680	0519548	-084247	L	3	20878	L	83090115	000000	000000	150600	024000	G E=2X,C=190,B=74
OD16K	HD 35155	51	0680	0519548	-084247	L	2	16715	L	83090115	000000	000000	154000	001300	G E=228,C=80,B=32
OD16K	HD 35155	51	0680	0519548	-084247	L	2	16716	L	83090119	000000	000000	193200	006000	G E=4X,C=130,B=35
OD16K	HD 35155	51	0680	0519548	-084247	L	2	16529	L	83080512	000000	000000	122100	008500	G E=4-5X,C=160,B=50
OD16K	HD 35155	51	0680	0519548	-084247	L	3	20615	L	83080510	000000	000000	184200	009500	G E=160,C=85,B=50
FM079	HD35149	20	0510	0520122	032952	H	3	20969	L	83090814	000000	000000	141351	000210	501 V
FM079	HD35149	20	0510	0520122	032952	H	2	16754	L	83090814	000000	000000	141930	000110	502 V
PHCAL	OO WAVCAL	98	0000	0521127	-363017	H	3	21649	S	83120104	043000	000200	000000	000000	G E=50X,B=125 TFLOO
PHCAL	OO WAVCAL	98	0000	0521127	-363017	L	3	21648	S	83120103	035800	000002	000000	000000	G E=10X,B=105 TFLOO
PHCAL	OO WAVCAL	98	0000	0521127	-363017	H	1	02342	S	83120105	053000	000016	000000	000000	G E=50X,B=118 TFLOO
PHCAL	OO WAVCAL	98	0000	0521127	-363017	L	1	02341	S	83120104	050000	000001	000000	000000	G E=10X,B=107 TFLOO
FE176	PKS0521-36	87	1500	0521128	-363018	L	3	21435	L	83110213	000000	000000	130025	018000	231 V
FI090	PKS0521-36	85	1530	0521128	-363018	L	3	21647	L	83113000	000000	000000	000000	212301	333 V EXPOSURE MODTIMED AT 22:3
FI090	PKS 0521-3	85	1530	0521128	-363018	L	1	02340	L	83113002	000000	000000	021041	600000	303 V
BEFPB	HD 35439	26	0490	0522090	+014808	H	3	21910	L	83123004	000000	000000	043500	000145	G C=1.5X,B=42
HEFDB	HD 35456	27	0800	0522095	-023231	L	3	21120	L	83092109	000000	000000	094400	000028	G C=185,B=17
HEFDB	HD 35456	27	0800	0522095	-023231	L	2	16837	L	83092109	000000	000000	094800	000016	G C=210,B=25
FM079	HD35395	20	0693	0522119	203224	H	3	20972	L	83090816	000000	000000	163813	007000	701 V
FE105	NGC1968	83	1291	0527150	-672800	L	2	16582	L	83081322	000000	000000	220528	002500	401 V
FE105	NGC1968	83	9999	0527150	-672800	E	9	01464	2	83081323	000000	000000	234241	004000	V NGC1986 AT R/P FES
FE105	NGC1968	83	1291	0527150	-672800	L	3	20684	L	83081322	000000	000000	224025	003000	501 V
FI066	TV COL	54	1380	0527344	-325121	L	1	02258	L	83111212	000000	000000	125747	003000	301 V
CVFPS	OO TV COL	63	1400	0527345	-325120	L	3	21017	L	83091113	000000	000000	130200	004500	G E=164,C=120,B=61
FI066	TVCOL	54	1380	0527345	-325122	L	3	21522	L	83111213	000000	000000	133251	003000	331 V
FI066	TV COL	54	1380	0527345	-325122	L	1	02260	L	83111313	000000	000000	130524	002400	332 V DOUBLE EXPOSURE 12M+12M
FI066	TV COL	54	1360	0527345	-325122	L	1	02261	L	83111314	000000	000000	140654	001200	332 V
FE105	NGC1974	83	9999	0527368	-672559	E	9	01465	2	83081323	000000	000000	234500	004000	V LWR 16583
FE105	NGC1974	83	1295	0527368	-672559	L	2	16583	L	83081323	000000	000000	234241	004000	601 V
FE105	NGC1974	83	1295	0527368	-672559	L	3	20685	L	83081400	000000	000000	002808	003000	601 V
FC201	HD36705	44	0714	0528358	-652919	L	1	02303	LS	83112018	185732	000300	185353	000040	451 V 301$ C=154
CVFJP	OO T AUR	55	1520	0528464	+302435	L	3	21545	L	83111508	000000	000000	085100	005500	G C=160,B=135
CVFJP	OO T AUR	55	1520	0528464	+302435	L	1	02268	L	83111507	000000	000000	075100	005500	G CB=205
CVFJP	OO T AUR	55	1520	0528464	+302435	L	3	21546	L	83111510	000000	000000	101700	009000	G C=80,B=55
CVFJP	OO T AUR	55	1520	0528464	+302435	L	3	21544	L	83111506	000000	000000	061600	009000	G C=112,B=85
LDFBH	OO GL 205	48	0800	0528567	-034216	L	1	02401	L	83121306	000000	000000	061800	002000	G E=1.5X,C=105,B=73
LDFBH	OO GL 205	48	0800	0528567	-034216	L	3	21759	L	83121300	000000	000000	005200	032000	G E=122,C=125,B=100
LDFBH	OO GL 205	48	0800	0528567	-034216	L	1	02402	L	83121307	000000	000000	073100	000700	G E=181,C=70,B=50
BEFPB	HD 36576	26	0570	0530357	+183023	H	3	21492	L	83110909	000000	000000	092400	000250	G C=120,B=33
HEFDB	HD 36668	27	0810	0530516	+003515	L	3	21121	L	83092110	000000	000000	104800	000112	G C=175,B=21

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
HEFDB	HD 36668	27	0810	0530516	+003515	L	2	16838	L	83092110	000000	000000	105300	000054	G	C=220,B=32
FE105	NGC2018	83	9999	0531199	-710659	E	9	01462	2	83081319	000000	000000	190001	004000	V	SWP 20681
FE105	NGC2018	83	1171	0531200	-710700	L	2	16580	L	83081319	000000	000000	190031	001500 601	V	
FE105	NGC 2018	83	1162	0531200	-710700	L	3	20681	L	83081318	000000	000000	183548	002000 701	V	
FE105	NGC2018	83	1164	0531200	-710700	L	3	20682	L	83081319	000000	000000	192935	001300 501	V	
FA074	NGC 2018	83	1336	0531252	-710612	L	1	02515	L	83122811	000000	000000	112200	004500 401	V	
FA074	NGC 2018	83	1336	0531252	-710612	L	3	21896	L	83122810	000000	000000	104637	003000 301	V	
IMFRP	00 B328	25	1070	0532119	-051206	L	3	21407	L	83103011	000000	000000	114700	012000	G	C=120,B=47
IMFRP	HD 294264	21	0950	0532420	-045400	L	3	21405	L	83103009	000000	000000	090300	000500	G	C=3%X,B=40
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	1	02321	L	83112302	000000	000000	022800	003000	G	C=1.1X,B=145
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	1	02320	L	83112301	000000	000000	010800	003000	G	C=210,B=80
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	3	21618	L	83112301	000000	000000	014500	003500	G	C=210,B=96
OD17K	00 LMC X-4	59	1380	0532470	-662913	L	1	02309	L	83112204	000000	000000	042100	004500	G	C=240,B=105
OB17K	00LMC X-4	59	1380	0532470	-662913	L	3	21607	L	83112205	000000	000000	051200	004500	G	C=215,B=100
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	3	21617	L	83112300	000000	000000	002200	004000	G	C=200,B=55
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	1	02319	L	83112223	000000	000000	233400	004000	G	C=220,B=60
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	3	21616	L	83112222	000000	000000	224800	004000	G	C=200,B=21
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	1	02310	L	83112206	000000	000000	060600	003000	G	C=1.5X,B=190
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	1	02318	L	83112222	000000	000000	220100	004000	G	C=220,B=40
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	3	21615	L	83112221	000000	000000	211000	004300	G	C=210,B=20
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	1	02317	L	83112220	000000	000000	202400	004000	G	C=230,B=40
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	3	21614	L	83112219	000000	000000	193600	004100	G	C=200,B=20
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	3	21609	L	83112211	000000	000000	111300	004500	G	C=200,B=19
OB17K	00 LMC X-4	05	1380	0532470	-662413	L	1	02311	L	83112210	000000	000000	102000	004000	G	C=230,B=72
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	3	21608	L	83112209	000000	000000	094800	002500	G	C=160,B=80
OD17K	00 LMC X-4	59	1380	0532470	-662413	L	3	21619	L	83112303	000000	000000	030800	003000	G	C=210,B=127
EI030	LMCX-4	59	1400	0532475	-662413	L	3	21569	L	83111718	000000	000000	182337	004500 500	V	
EI030	LMCX-4	59	1400	0532475	-662413	L	1	02284	L	83111719	000000	000000	191351	003300 403	V	
FI048	LMC X-4	59	1407	0532475	-662413	L	3	21472	L	83110716	000000	000000	165538	004500 500	V	
FI048	LMC X-4	59	1407	0532475	-662413	L	1	02243	L	83110717	000000	000000	174737	003000 402	V	
OBFGS	HD 37018	20	0465	0532550	-045210	H	3	20782	L	83082510	000000	000000	104000	000035	G	C=175,B=32
IMFRP	00 B885	21	1130	0533180	-054200	L	1	02178	L	83103008	000000	000000	081600	003500	G	C=2X,B=163
CCFTS	HD 36994	41	0630	0533241	+255432	L	3	21477	L	83110805	000000	000000	054900	012000	G	E=109,C=12X,B=50
MLFPC	00SK-67191	12	1350	0533270	-673400	L	2	16736	L	83090509	000000	000000	094900	002500	G	E=201,C=180,B=45
MLFPC	00SK-67191	12	1350	0533270	-673400	L	3	20929	L	83090510	000000	000000	101900	003000	G	E=225,C=203,B=80
CSFKB	00CS-STAR3	19	0000	0533553	-064702	L	3	21773	L	83121419	000000	000000	190200	027000	G	C=70,B=66
CSFKB	00CS-STAR2	19	0000	0533564	-064750	L	3	21782	L	83121619	000000	000000	191600	023000	G	C=70,B=60
CSFKB	00 SKYBKD	19	0000	0533564	-064750	L	2	17185	L	83121619	000000	000000	192100	022700	G	B=56
IMFRP	00 B1018	25	1070	0534100	-053000	L	3	21404	L	83103006	000000	000000	063500	009000	G	C=180,B=65
FI095	A0538-66	59	0145	0535427	-665339	L	2	16676	L	83082618	000000	000000	185600	006000 303	V	
EI029	A0538-66	59	1450	0535427	-665340	L	3	21325	L	83102220	000000	000000	201952	008700 411	V	
EC097	NULL IMAGE	99	9999	0535428	-665340	L	2	16977		83101400	000000	000000	000000	000000	V	
EC097	A0538-66	59	1400	0535428	-665340	L	3	21295	L	83101417	000000	000000	174912	016000 501	V	
EC097	A0538-66	59	1400	0535428	-665340	L	1	02044	L	83101420	000000	000000	203400	006900 403	V	
FI090	A0538-66	59	1450	0535428	-665340	L	3	21312	L	83102014	000000	000000	145529	006000 331	V	

PRD	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
FI048	A0538-66	59	1500	0535428	-665340	L	3	21473	L	83110718	000000	000000	184232	006500	400	V
FI048	A0538-66	59	9999	0535428	-665340	L	1	02183	L	83103021	000000	000000	211717	003000	302	V
FI095	A0538-66	59	0145	0535428	-665340	L	3	20812	L	83082620	000000	000000	200134	012000	351	V
FI048	A0538-66	59	9999	0535428	-665340	L	3	21410	L	83103019	000000	000000	191352	012000	401	V
EI030	A0538-66	59	1450	0535428	-665340	L	3	21568	L	83111714	000000	000000	144406	009000	301	V
FI094	A0538-66	59	1500	0535428	-665340	L	3	20909	L	83090318	000000	000000	184746	014900	502	V
EI030	A0538-66	59	1450	0535428	-665340	L	1	02283	L	83111716	000000	000000	162006	009008	302	V
CCFLH	HD 37495	41	0530	0535474	-284306	H	1	02205	L	83110310	000000	000000	102400	004000	G	E=117,C=3X,B=70
FI217	HDE245770	59	0925	0535479	261717	L	1	02253	L	83111012	000000	000000	125521	000400	502	V
FI217	HDE245770	59	0928	0535479	261717	H	3	21504	L	83111013	000000	000000	132222	038500	403	V
FI217	HDE 245770	59	0927	0535479	261717	L	3	21503	L	83111012	000000	000000	122639	001600	500	V
FI217	HDE245770	59	0936	0535480	261718	L	3	21517	L	83111116	000000	000000	163919	005528	501	V TRAIL R=0.096,I=16 (1 DI
FE157	HDE245770	14	0929	0535480	261718	L	3	21209	L	83100114	000000	000000	143421	001500	511	V
FI217	HDE245770	59	0942	0535480	261718	L	1	02255	L	83111119	000000	000000	193244	000400	601	V
FI217	HDE245770	59	0924	0535480	261718	H	3	21496	L	83110917	000000	000000	172356	014300	301	V
FE157	HDE245770	14	0927	0535480	261718	L	3	21210	L	83100115	000000	000000	152730	003440	311	V TRL 0.096 SEC/SEC I=10
FE157	HDE245770	14	0932	0535480	261718	L	2	16908	L	83100114	000000	000000	145645	000320	512	V
FI217	HDE245770	59	0924	0535480	261718	H	3	21495	L	83110913	000000	000000	133430	005200	302	V TRAILED SPECTRUM,WRONG DI
FI217	HDE245770	59	0929	0535480	261718	L	1	02246	L	83110916	000000	000000	165503	000330	502	V
FM079	HD37367	20	0609	0536075	291118	H	3	21013	L	83091020	000000	000000	204253	002800	601	V
HSFTS	HD 37490	26	0450	0536326	+040541	H	3	20674	L	83081313	000000	000000	133800	000210	G	C=230,B=40
MLFCW	HD 37490	24	0450	0536326	+040541	H	3	20875	L	83090110	000000	000000	105400	000210	G	C=230,B=40
HSFTS	HD 37490	26	0450	0536326	+040541	H	3	21691	L	83120505	000000	000000	053600	000210	G	C=250,B=40
HSFTS	HD 37490	26	0450	0536326	+040541	H	3	20675	L	83081314	000000	000000	140800	000525	G	C=3X,B=73
HSFTS	HD 37490	26	0450	0536326	+040541	H	3	21384	L	83102808	000000	000000	085600	000210	G	C=240,B=45
FA255	HD37490	26	0463	0536326	040541	H	3	21018	L	83091114	000000	000000	144613	000210	601	V
MLFCW	HD 37490	24	0450	0536326	+040541	H	3	21047	L	83091407	000000	000000	070100	000210	G	C=240,B=40
MLFCW	HD 37490	24	0450	0536326	+040541	H	3	20981	L	83090910	000000	000000	102000	000210	G	C=235,B=40
MLFCW	HD 37490	24	0450	0536326	+040541	H	3	20770	L	83082415	000000	000000	150200	000210	G	C=240,B=47
HSFTS	HD 37490	26	0450	0536326	+040541	H	3	21385	L	83102809	000000	000000	092600	000525	G	C=3X,B=95
HSFTS	HD 37490	26	0450	0536326	+040541	H	3	21160	L	83092506	000000	000000	064800	000525	G	B=72
HSFTS	HD 37490	26	0450	0536326	+040541	H	3	21159	L	83092506	000000	000000	061600	000210	G	C=220,B=40
MLFCW	HD 37490	24	0450	0536326	+040541	H	3	20836	L	83082912	000000	000000	124800	000210	G	C=1.5X,B=80
MLFCW	HD 37490	24	0450	0536326	+040541	H	3	20804	L	83082611	000000	000000	114400	000210	G	C=245,B=60
IBFSP	HD 37453	39	0820	0536443	+300337	L	2	16852	L	83092308	000000	000000	082000	000500	G	E=204,C=175,B=30
IBFSP	HD 37453	39	0820	0536443	+300337	L	2	16773	L	83091208	000000	000000	083100	001200	G	E=2,C1.5,B=32
IBFSP	HD 37453	39	0820	0536443	+300337	L	3	21025	L	83091208	000000	000000	085400	001400	G	C=145,B=35
IBFSP	HD 37453	39	0820	0536443	+300337	L	2	16774	L	83091209	000000	000000	092600	000400	G	C=160,B=27
IBFSP	HD 37453	39	0820	0536443	+300337	L	3	21028	L	83091213	000000	000000	133200	001500	G	C=170,B=44
IBFSP	HD 37453	39	0820	0536443	+300337	L	3	21139	L	83092310	000000	000000	103700	001400	G	C=220,B=130
IBFSP	HD 37453	39	0820	0536443	+300337	L	3	21116	L	83092104	000000	000000	041000	002000	G	C=165,B=2
IBFSP	HD 37453	39	0820	0536443	+300337	L	2	16746	L	83090622	000000	000000	221000	000300	G	C=120,B=22
IBFSP	HD 37453	39	0820	0536443	+300337	L	3	20951	L	83090622	000000	000000	221900	000600	G	C=70,B=17
IBFSP	HD 37453	39	0820	0536443	+300337	L	3	21077	L	83091713	000000	000000	133400	001400	G	C=170,B=65
IBFSP	HD 37453	39	0820	0536443	+300337	L	3	21137	L	83092307	000000	000000	074100	001400	G	C=160,B=52

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
FA032	HD37974	23	1106	0536489	-692429	H	1	02005	L	83092315	000000	000000	151355	032000	465	V
FA032	HD37974	23	1107	0536489	-692429	L	3	21142	L	83092315	000000	000000	154004	001500	500	V
MLFPC	OOSK-66172	12	1310	0536589	-662350	L	3	20915	L	83090410	000000	000000	101600	002600		G C=210,B=70
MLFPC	OOSK-66172	12	1310	0536589	-662350	L	2	16729	L	83090409	000000	000000	094800	002100		G C=170,B=40
CCFDS	HD 37394	46	0620	0537168	+532748	H	1	02107	L	83102210	000000	000000	102500	003000		G E=217,C=180,B=111
IMFTS	HD 37903	20	0780	0539073	-021658	L	3	21294	L	83101413	000000	000000	133300	000033		G C=160,B=15
IMFTS	HD 37903	20	0780	0539073	-021658	H	1	02043	L	83101413	000000	000000	130400	002500		G C=185,B=45
IMFTS	HD 37903	20	0780	0539073	-021658	H	3	21293	L	83101412	000000	000000	121200	004500		G C=190,B=45
IMFTS	HD 37903	20	0780	0539073	-021658	H	1	02042	L	83101411	000000	000000	114000	002000		G C=178,B=58
BEFPB	HD 37967	26	0620	0540172	+231057	H	3	21491	L	83110908	000000	000000	083600	000715		G C=180,B=50
PMFCI	OO FU ORI	58	0950	0542382	+090302	H	2	16741	L	83090521	000000	000000	214900	040500		G E=188,C=160,B=73
PMFCI	OO FU ORI	58	0950	0542382	+090302	L	2	16705	L	83083109	000000	000000	091100	003500		G E=218,C=90,B=35
PMFCI	OO FU ORI	58	0950	0542382	+090302	L	2	16704	L	83083102	000000	000000	023900	035500		G E=8X,C=3X,B=73
MLFPH	OO L50	25	1290	0542454	-691840	L	1	02308	SL	83112201	015200	003000	015100	003000		G B=92
MLFPH	OO L50	25	1290	0542454	-691840	L	3	21606	SL	83112202	022900	008000	022800	008000		G B=140
MLFPH	OO L50	25	1290	0542454	-691840	L	3	21626	SL	83112402	021500	004500	021400	004500		G C=170,B=115
MLFPH	OO L50	25	1290	0542454	-691840	L	2	17020	SL	83112403	030700	004000	030600	004000		G C=180,B=57
CSFKB	OO HH 24-A	19	1650	0543356	-001132	L	3	21774	L	83121501	000000	000000	010000	012000		G B=90
HHFJS	OO HH-24A	64	1600	0543356	-001132	L	3	21518	L	83111121	000000	000000	211700	056000		G C=130,B=100
PHCAL	HD 38666	12	0520	0544084	-321927	L	1	02426	L	83121806	000000	000000	064800	000001		G C=135,B=35
PHCAL	HD 38666	12	0520	0544084	-321927	L	3	21795	L	83121806	000000	000000	064200	000001		G C=145,B=16
LGFEB	HD 39003	45	0480	0548013	+390809	L	3	21267	L	83101022	000000	000000	225500	024000		G E=72,C=80,B=50
FE174	MCG8-11-11	84	1449	0551097	462549	L	3	21481	L	83110815	000000	000000	150816	027900	232	V
FE223	MCG8-11-11	84	1400	0551097	462549	L	3	21247	L	83100615	000000	000000	151601	020000	331	V
FE174	MCG8-11-11	84	1449	0551097	462549	L	1	02244	L	83110813	000000	000000	133148	009000	332	V
CSFTA	HD 39587	44	0440	0551251	+201606	H	3	21462	L	83110619	000000	000000	195200	084500		G E=4X,C=4X,B=160
CSFTA	OO WAVCAL	98	9999	0551251	+201606	H	3	21463	S	83110703	030400	000018	000000	000000		G C=10X,B=105 TFLOO
CSFTA	HD 39587	44	0440	0551252	+201607	D	9	01495	L	83110611	000000	000000	113900	016000		G NO COMMENTS
FC225	HD39587	44	9999	0551252	201607	E	9	01496	2	83110600	000000	000000	000000	016000		V FES FOR LWP 2235 AND SWP2
CSFTA	HD 39587	44	0440	0551252	+201607	H	1	02234	L	83110610	000000	000000	103000	001000		G E=187,C=220,B=47
CSFTA	HD 39587	44	0440	0551252	+201607	H	1	02236	L	83110703	000000	000000	031200	002000		G E=1.5X,C=1.5X,B=50
FC225	HD39587	44	0468	0551252	201607	H	1	02235	L	83110611	000000	000000	111124	006000	702	V OBSERVATION STARTED AT GS
CSFTA	HD 39587	44	0440	0551252	+201607	H	1	02233	L	83110609	000000	000000	093400	002000		G E=1.5X,C=1.7X,B=70
IMFRP	OO UX ORI	30	0870	0552010	-035118	L	3	21406	L	83103010	000000	000000	103400	001000		G C=80,B=45
IMFRP	OO UX ORI	30	0870	0552010	-035124	L	1	02180	L	83103011	000000	000000	110700	002000		G C=2X,B=70
FA060	IC2149	70	1072	0552409	460553	H	3	20841	L	83082918	000000	000000	181635	020800	452	V
APFRP	HD 40312	36	0260	0556186	+371239	L	1	02166	L	83102906	000000	000000	065500	000002		G C=192,B=45
APFRP	HD 40312	36	0260	0556186	+371239	L	3	21375	SL	83102706	065700	000004	065000	000004		G C=205,B=30
APFRP	HD 40312	36	0260	0556186	+371239	L	3	21390	L	83102906	000000	000000	064600	000004		G C=200,B=25
APFRP	HD 40312	36	0260	0556186	+371239	L	1	02150	SL	83102707	074900	000002	073900	000002		G C=200,B=45
APFRP	HD 40312	36	0260	0556187	+371240	L	1	02184	SL	83103106	064400	000002	063800	000002		G C=200,B=38
APFRP	HD 40312	36	0260	0556187	+371240	L	3	21412	SL	83103106	063300	000005	062700	000005		G C=200,B=25
APFRP	HD 40312	36	0260	0556190	+371300	L	3	21327	L	83102306	000000	000000	063800	000004		G C=218,B=18
APFRP	HD 40312	36	0260	0556190	+371300	L	1	02111	L	83102306	000000	000000	064800	000002		G C=200,B=35
APFRP	HD 40312	36	0260	0556190	+371300	H	3	21331	L	83102312	000000	000000	125900	000130		G C=1.1X,B=40

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT	
APFRP	HD 40312	36	0260	0556190	+371240	H	1	02139	L	83102512	000000	000000	124000	000030	G C=200,B=38
APFRP	HD 40312	36	0260	0556190	+371240	H	3	21357	L	83102512	000000	000000	124500	000110	G C=220,B=35
APFRP	HD 40312	36	0260	0556190	+371300	L	3	21378	SL	83102713	132600	000004	133100	000003	G C=3,B=30
APFRP	HD 40312	36	0260	0556190	+371300	L	3	21332	L	83102313	000000	000000	133700	000004	G C=220,B=17
APFRP	HD 40312	36	0260	0556190	+371300	L	3	21358	SL	83102513	132500	000004	131600	000004	G C=205,B=20
APFRP	HD 40312	36	0260	0556190	+371240	L	3	21353	L	83102507	000000	000000	070400	000004	G C=205,B=27
APFRP	HD 40312	36	0260	0556190	+371300	H	3	21414	L	83103109	000000	000000	093600	000110	G C=255,B=47
APFRP	HD 40312	36	0260	0556190	+371240	H	1	02186	L	83103109	000000	000000	093000	000030	G C=210,B=50
APFRP	HD 40312	36	0260	0556190	+371240	L	1	02135	L	83102506	000000	000000	065600	000002	G C=200,B=40
APFRP	HD 40312	36	0260	0556190	+371300	H	1	02154	L	83102713	000000	000000	132200	000030	G C=218,B=40
PHCAL	OO WAVCAL	98	0000	0558384	-754238	H	2	16986	S	83110109	093700	000016	000000	000000	G E=50X,B=135 TFL00
PHCAL	OO WAVCAL	98	0000	0558384	-754238	L	1	02190	S	83110105	054800	000001	000000	000000	G E=10X,B=103 TFL00
PHCAL	OO WAVCAL	98	0000	0558384	-754238	H	1	02191	S	83110106	062400	000016	000000	000000	G E=50X,B=112 TFL00
PHCAL	OO TFLOOD	99	0000	0558384	-754238	H	1	02192	L	83110107	000000	000000	070800	000025	G B=105
PHCAL	OO TFLOOD	99	0000	0558384	-754238	H	2	16987	L	83110110	000000	000000	100400	000007	G B=135
PHCAL	OO WAVCAL	98	0000	0558384	-754238	L	3	21423	S	83110107	072500	000002	000000	000000	G E=10X,B=102 TFL00
PHCAL	OO WAVCAL	98	0000	0558384	-754238	H	3	21424	S	83110108	081600	000200	000000	000000	G E=65X,B=131 TFL00
PHCAL	OO TFLOOD	99	0000	0558384	-754238	H	3	21425	L	83110108	000000	000000	085300	000005	G B=111
PHCAL	OO WAVCAL	98	0000	0558384	-754238	L	2	16985	S	83110109	090800	000001	000000	000000	G E=10X,B=91 TFL00
NPFJK	PK 1-27	70	9999	0558495	-754030	L	3	21422	L	83110103	000000	000000	034900	008000	G C=200,B=47
FE105	NGC2164	83	1170	0558560	-683100	L	3	21594	L	83112019	000000	000000	193622	001100	301 V
FE105	NGC2164	83	1172	0558560	-683100	L	2	16584	L	83081401	000000	000000	011736	002000	402 V
FA179	HD40932	30	0428	0559379	093857	L	3	20732	LS	83082018	190046	000050	185401	000051	500 V 600$ TRAILED LAP R=0.391
FA179	HD40932	30	0428	0559379	093857	L	2	16631	LS	83082019	190959	000018	190458	000016	502 V 702$TRAIL LAP R=1.250 1 P
NVFSM	OO00LMCP40	70	1600	0610366	-675534	L	3	20592	L	83080302	000000	000000	024400	042000	G E=3X,C=93,B=80
FE105	NGC2214	83	9999	0613009	-681559	E	9	01463	2	83081320	000000	000000	201500	004000	V LWR16581
FE105	NGC2214	83	1266	0613010	-681600	L	3	20683	L	83081320	000000	000000	204544	005000	301 V
FE105	NGC2214	83	1267	0613010	-681600	L	2	16581	L	83081320	000000	000000	201617	002200	301 V
IBFSP	HD 43246	39	0740	0613117	+285212	L	3	21138	L	83092309	000000	000000	093300	000430	G C=165,B=30
IBFSP	HD 43246	39	0740	0613117	+285212	H	2	16834	L	83092103	000000	000000	033400	002500	G C=120,B=28
IBFSP	HD 43246	39	0740	0613117	+285212	L	3	21115	L	83092103	000000	000000	031800	000400	G C=140,B=20
IBFSP	HD 43246	39	0050	0613117	+285212	L	2	16853	L	83092309	000000	000000	095200	000106	G C=218,B=30
IBFSP	HD 43246	39	0740	0613117	+285212	H	2	16775	L	83091210	000000	000000	100800	003500	G E=162,C=180,B=72
IBFSP	HD 43246	39	0740	0613117	+285212	L	3	21026	L	83091210	000000	000000	104800	000400	G C=145,B=20
BEFPB	HD 43544	26	0590	0613539	-163559	H	3	21911	L	83123005	000000	000000	051500	000500	G C=220,B=47
CCFLH	HD 43587	44	0570	0614371	+050702	H	1	02204	L	83110308	000000	000000	080300	010000	G E=196,C=4.5X,B=124
BEFPB	HD 44458	26	0560	0619048	-114456	H	3	21912	L	83123005	000000	000000	055500	000225	G C=120,B=31
BEFPB	HD 44458	26	0560	0619048	-114456	H	3	21917	L	83123009	000000	000000	094300	000445	G C=185,B=33
FA255	HD44743	23	0201	0620298	-175547	H	3	21019	S	83091115	153426	000011	000000	000000	300 V
MGFLH	HD 45067	44	0586	0622429	-005449	H	1	02219	L	83110423	000000	000000	233500	007000	G E=92,C=1.5X,B=55
FI094	HD45166	11	1001	0623360	080018	L	2	16725	L	83090316	000000	000000	165746	000150	512 V
FI094	HD45166	11	1000	0623360	080018	H	3	20925	L	83090420	000000	000000	200532	007200	431 V
FA096	HD45166	11	1001	0623360	080018	H	3	20950	L	83090620	000000	000000	200349	007200	331 V
FI094	HD45166	11	1000	0623360	080018	H	3	20940	L	83090519	000000	000000	194643	009000	441 V
FI094	HD45166	11	0997	0623360	080018	L	3	20907	L	83090316	000000	000000	165239	000200	510 V

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
MPFHB	000623+711	63	1240	0623465	+710634	L	2	16940	L	83100710	000000	000000	104900	002500		G C=175,B=40
NPFHB	000623+711	63	1240	0623465	+710634	L	3	21251	L	83100710	000000	000000	101300	003000		G E=110,C=120,B=46
OBFGS	HD 45813	21	0448	0626188	-323250	H	3	20783	L	83082511	000000	000000	111800	000130		G C=205,B=41
MLFCG	HD 46149	12	0760	0629129	+050411	H	3	21585	L	83112006	000000	000000	061000	003000		G C=180,B=81
MLFCG	HD 46150	12	0670	0629160	+045848	H	3	21584	L	83112005	000000	000000	051900	001700		G C=185,B=52
BEFPB	HD 47054	26	0550	0634076	-051005	H	3	21909	L	83123003	000000	000000	034200	001030		G C=240,B=45
FA050	HD48097	30	0541	0639295	174200	L	3	21395	L	83102914	000000	000000	142612	000040	700	V
CVFJR	OO HL CMA	54	0970	0643032	-164823	L	3	21729	L	83120906	000000	000000	065800	000800		G C=175,B=105
CVFJR	OO HL CMA	54	0970	0643032	-164823	L	1	02372	L	83120907	000000	000000	071800	000600		G C=195,B=125
CVFJR	OO HL CMA	54	0970	0643032	-164823	L	3	21731	S	83120909	090900	003500	000000	000000		G C=155,B=40
CVFJR	OO HL CMA	54	0970	0643032	-164823	L	3	21730	L	83120907	000000	000000	075100	000900		G C=145,B=85
CVFJR	OO HL CMA	54	0970	0643032	-164823	L	1	02373	L	83120908	000000	000000	085400	000800		G C=160,B=55
CVFJR	OO HL CMA	54	1260	0643032	-164823	L	3	21722	L	83120807	000000	000000	075000	001000		G C=118,B=90
CBFMP	HD 48914	66	7500	0643190	+023357	H	3	21465	L	83110706	000000	000000	062200	007500		G NO COMMENTS
CBFMP	HD 48914	60	0750	0643190	+023357	L	1	02238	SL	83110706	061700	000040	061200	000050		G NO COMMENTS
HCFHB	HD 50264	44	0900	0649156	-293100	L	2	16941	L	83100712	000000	000000	120200	001230		G C=190,B=28
HCFHB	HD 50264	44	0900	0649156	-293100	L	3	21252	L	83100712	000000	000000	121900	009000		G C=68,B=44
FI094	HD50896	11	0675	0652081	-235152	H	3	20935	L	83090514	000000	000000	143503	000400	371	V
FI094	HD50896	11	0682	0652081	-235152	H	2	16732	L	83090417	000000	000000	170339	000400	352	V
FI094	HD50896	11	0681	0652081	-235152	H	3	20922	L	83090416	000000	000000	165604	000400	371	V
WRFPC	HD 50896	11	0690	0652081	-235152	H	3	20932	L	83090512	000000	000000	123000	000200		G E=2X,C=85,B=35
WRFPC	HD 50896	11	0690	0652081	-235152	H	3	20933	L	83090512	000000	000000	125700	000130		G E=1.5X,C=127,B=23
FI094	HD50896	11	0676	0652081	-235152	H	2	16740	L	83090519	000000	000000	190125	000400	352	V
WRFPC	HD 50896	11	0690	0652081	-235152	H	3	20934	L	83090513	000000	000000	132500	000400		G E=4X,C=150,B=50
WRFPC	HD 50896	11	0690	0652081	-235152	H	2	16737	L	83090513	000000	000000	133300	000400		G E=236,C=135,B=40
WRFPC	HD 50896	11	0690	0652081	-235152	L	3	20941	L	83090606	000000	000000	065000	000400		G C=4X,B=32
WRFPC	HD 50896	11	0690	0652081	-235152	H	3	20931	L	83090512	000000	000000	120000	000400		G E=4X,C=140,B=45
WRFPC	HD 50896	11	0690	0652081	-235152	H	3	20930	L	83090511	000000	000000	112700	000400		G E=4X,C=138,B=40
WRFPC	HD 50896	11	0690	0652081	-235152	H	3	20943	L	83090612	000000	000000	123500	000400		G E=4X,C=220,B=40
WRFWR	HD 50896	11	0690	0652081	-235152	H	2	16764	L	83091009	000000	000000	092800	000320		G E=180,C=105,B=30
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	21001	L	83091009	000000	000000	092200	000340		G E=3X,C=120,B=29
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	21000	L	83091008	000000	000000	085300	000115		G E=230,C=60,B=25
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20999	L	83091008	000000	000000	082100	000340		G E=3X,C=120,B=30
FI094	HD50896	11	0676	0652081	-235152	H	2	16731	L	83090414	000000	000000	144411	000400	353	V
FI094	HD50896	11	0690	0652081	-235152	H	3	20920	L	83090414	000000	000000	141936	000400	371	V
WRFPC	HD 50896	11	0690	0652081	-235152	L	3	20927	L	83090506	000000	000000	063900	000400		G E=4X,C=120,B=28
FI094	HD50896	11	0674	0652081	-235152	H	2	16733	L	83090419	000000	000000	192232	000400	452	V
FA096	HD50896	11	0682	0652081	-235152	H	3	20949	L	83090618	000000	000000	185159	000400	371	V
FI094	HD50896	11	0679	0652081	-235152	H	3	20939	L	83090518	000000	000000	185405	000400	371	V
FA096	HD50896	11	0677	0652081	-235152	H	2	16745	L	83090618	000000	000000	185908	000400	352	V
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20899	L	83090310	000000	000000	105300	000050		G E=175,C=44,B=21
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20900	L	83090311	000000	000000	112500	000340		G E=3X,C=120,B=37
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20998	L	83091007	000000	000000	075200	000118		G E=230,C=60,B=24
EA143	HD50896	11	0684	0652081	-235152	L	3	21806	LS	83121911	114118	000004	113808	000004	570	V 360$
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20997	L	83091007	000000	000000	072000	000340		G E=3X,C=115,B=30

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20996	L	83091006	000000	000000	065300	000110		G E=205,C=85,B=21
WRFPC	HD 50896	11	0690	0652081	-235152	H	3	20944	L	83090613	000000	000000	132600	000200		G E=2X,C=180,B=27
FI094	HD50896	11	0678	0652081	-235152	H	3	20924	L	83090419	000000	000000	191520	000400	371	V
WRFWR	HD 50896	11	0690	0652081	-235152	L	3	20901	L	83090312	000000	000000	121200	000002		G E=169,C=52,B=27
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20902	L	83090312	000000	000000	124900	000055		G E=193,C=58,B=25
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20903	L	83090313	000000	000000	131500	000320		G E=3X,C=125,B=45
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20904	L	83090313	000000	000000	134600	000110		G E=230,C=60,B=27
EA143	HD50896	11	0642	0652081	-235152	H	3	21805	L	83121910	000000	000000	104546	000500	371	V
FI094	HD50896	11	0682	0652081	-235152	H	2	16738	L	83090514	000000	000000	144257	000400	452	V
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20977	L	83090907	000000	000000	071300	000055		G E=183,C=80,B=21
WRFPC	HD 50896	11	0690	0652081	-235152	H	3	20913	L	83090407	000000	000000	070600	000400		G E=4X,C=120,B=30
FI094	HD50896	11	0677	0652081	-235152	H	3	20937	L	83090516	000000	000000	165124	000400	370	V
FI094	HD50896	11	0682	0652081	-235152	H	2	16739	L	83090516	000000	000000	165844	000400	452	V
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20958	L	83090710	000000	000000	103400	000055		G E=196,C=70,B=21
FA096	HD50896	11	0688	0652081	-235152	H	3	20945	L	83090614	000000	000000	142940	000400	371	V
FA096	HD50896	11	0681	0652081	-235152	H	2	16743	L	83090614	000000	000000	143648	000400	352	V
WRFPC	HD 50896	11	0694	0652081	-235152	H	3	20963	L	83090806	000000	000000	064200	000400		G E=4X,C=120,B=29
WRFPC	HD 50896	11	0690	0652081	-235152	H	3	20916	L	83090411	000000	000000	113800	000400		G E=4X,C=130,B=40
WRFPC	HD 50896	11	0690	0652081	-235152	H	3	20917	L	83090412	000000	000000	122200	000200		G E=2X,C=85,B=30
WRFPC	HD 50896	11	0690	0652081	-235152	H	3	20918	L	83090412	000000	000000	124900	000130		G E=1.5X,C=80,B=32
WRFPC	HD 50896	11	0690	0652081	-235152	H	3	20919	L	83090413	000000	000000	132400	000400		G E=1.5X,C=80,B=32
FI094	HD50896	11	0680	0652081	-235152	H	3	20908	L	83090317	000000	000000	174621	000400	371	V
FA096	HD50896	11	0683	0652081	-235152	H	3	20947	L	83090616	000000	000000	164004	000400	370	V
WRFWR	HD 50896	11	0690	0652081	-235152	H	2	16749	L	83090710	000000	000000	104100	000300		G E=194,C=160,B=31
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20959	L	83090711	000000	000000	115800	000320		G E=3X,C=185,B=32
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20960	L	83090712	000000	000000	124700	000110		G E=237,C=62,B=25
FI094	HD50896	11	0671	0652081	-235152	H	3	20905	L	83090314	000000	000000	142141	000400	571	V
FA096	HD50896	11	0683	0652081	-235152	H	2	16744	L	83090616	000000	000000	164724	000400	352	V
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20961	L	83090713	000000	000000	134500	000320		G E=3X,C=120,B=32
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20980	L	83090909	000000	000000	092600	000340		G E=3X,C=115,B=27
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20979	L	83090908	000000	000000	084200	000110		G E=210,C=53,B=22
WRFWR	HD 50896	11	0690	0652081	-235152	H	3	20978	L	83090908	000000	000000	080000	000320		G E=3X,C=105,B=28
WRFPC	HD 50896	11	0690	0652081	-235152	H	2	16730	L	83090413	000000	000000	133300	000400		G E=237,C=128,B=38
EA143	HD50896	11	0682	0652081	-235152	H	1	02431	L	83121910	000000	000000	102410	000500	471	V
WRFPC	HD 50896	11	0690	0652081	-235152	H	3	20968	L	83090813	000000	000000	131700	000400		G C=125,B=31
IBFSP	HD 50820	39	0300	0652103	-014132	H	2	16776	L	83091212	000000	000000	125300	000900		G E=170,C=180,B=42
IBFSP	HD 50820	39	0300	0652103	-014132	H	3	21027	L	83091211	000000	000000	114100	001200		G C=140,B=40
CBFMP	HD 51480	66	0700	0654480	-104500	H	3	21445	L	83110406	000000	000000	061800	006000		G E=255,C=94,B=51
CBFMP	HD 51480	66	0700	0654480	-104500	H	1	02212	L	83110407	000000	000000	072300	003800		G E=3X,C=190,B=74
CBFMP	HD 51480	66	0700	0654480	-104500	H	1	02214	L	83110409	000000	000000	093400	002000		G E=1.5X,C=180,B=72
CCFLH	HD 52711	44	0590	0700198	+292522	H	1	02220	L	83110501	000000	000000	012400	012000		G E=153,C=3X,B=80
BEFPB	HD 52918	26	0500	0700257	-040955	H	3	21913	L	83123006	000000	000000	063800	000105		G C=165,B=33
MLFCG	HD 53975	12	0650	0704162	-121855	H	3	21589	L	83112009	000000	000000	090600	000500		G C=220,B=75
MLFCG	HD 54662	12	0620	0706581	-101555	H	3	21588	L	83112008	000000	000000	082800	000700		G C=240,B=105
MLFCG	HD 54662	12	0620	0706581	-101555	H	3	21586	L	83112007	000000	000000	071700	000500		G C=180,B=72

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT	
IGFBS	HD 54911	23	0732	0707529	-153605	H	3	21678	L	83120404	000000	000000	043500	002500	G C=1.1X,B=61	
CCFEB	HD 56986	40	0350	0717083	+220434	H	2	16965	L	83101108	000000	000000	081200	000800	G C=1.5X,B=40	
MLFCG	HD 57682	12	0640	0719381	-085300	H	3	21590	L	83112009	000000	000000	094500	000500	G C=240,B=60	
MLFCG	HD 57682	12	0640	0719381	-085300	H	3	21587	L	83112007	000000	000000	075100	000300	G C=195,B=67	
BEFPB	HD 58343	26	0530	0722245	-160606	H	3	21914	L	83123007	000000	000000	071700	000400	G C=180,B=36	
IGFBS	HD 58510	23	0680	0722579	-210429	H	3	21677	L	83120403	000000	000000	032900	003200	G C=1.2X,B=60	
CCFEB	HD 58728	41	0520	0724464	+213257	L	3	21269	L	83101108	000000	000000	083600	009000	G C=10X,B=70	
AFFJL	HD 58728	41	0520	0724464	+213257	L	3	21539	L	83111403	000000	000000	033300	012000	G E=156,C=10X,B=32	
MLFCW	HD 58978	20	0550	0724522	-225903	H	3	20837	L	83082913	000000	000000	132500	000240	G C=250,B=83	
MLFCW	HD 58978	20	0550	0724522	-225903	H	3	20874	L	83090110	000000	000000	101300	000240	G C=210,B=40	
MLFCW	HD 58978	20	0550	0724522	-225903	H	3	20805	L	83082612	000000	000000	122500	000240	G C=235,B=68	
MLFCW	HD 58978	20	0550	0724522	-225903	H	3	20769	L	83082414	000000	000000	142100	000240	G C=225,B=55	
CVFES	OO KQ MON	63	1210	0728590	-101506	L	3	21804	L	83121909	000000	000000	093700	001300	G C=70,B=18	
CBFBH	OO YY GEM	48	0920	0731257	+315846	L	3	21748	L	83121106	000000	000000	065200	009000	G E=68,C=70,B=45	
CBFBH	OO YY GEM	48	0920	0731257	+315846	L	3	21743	L	83121019	000000	000000	192500	009000	G E=82,C=58,B=30	
CBFBH	OO YY GEM	48	0920	0731257	+315846	L	1	02384	L	83121021	000000	000000	210300	001000	G E=213,C=60,B=40	
CBFBH	OO YY GEM	48	0920	0731257	+315846	L	1	02388	L	83121106	000000	000000	061000	001000	G E=194,C=55,B=38	
CBFBH	OO YY GEM	48	0920	0731257	+315846	L	3	21744	L	83121021	000000	000000	214500	009000	G E=71,C=62,B=30	
CBFBH	OO YY GEM	48	0920	0731257	+315846	L	1	02385	L	83121023	000000	000000	231800	001000	G E=187,C=55,B=35	
CBFBH	OO YY GEM	48	0920	0731257	+315846	L	3	21745	L	83121100	000000	000000	000000	009000	G E=64,C=60,B=42	
CBFBH	OO YY GEM	48	0920	0731257	+315846	L	3	21747	L	83121104	000000	000000	043500	009000	G E=65,C=65,B=39	
CBFBH	OO YY GEM	48	0920	0731257	+315846	L	1	02387	L	83121103	000000	000000	035000	001000	G E=187,C=52,B=38	
CBFBH	OO YY GEM	48	0920	0731257	+315846	L	1	02389	L	83121108	000000	000000	083300	001000	G E=172,C=55,B=35	
CBFBH	OO YY GEM	48	0920	0731257	+315846	H	3	21746	L	83121102	000000	000000	021400	009000	G E=65,C=58,B=35	
CBFBH	OO YY GEM	48	0920	0731257	+315846	L	1	02390	L	83121109	000000	000000	093300	001000	G E=196,C=55,B=35	
CBFBH	OO YY GEM	48	0920	0731257	+315846	L	1	02386	L	83121101	000000	000000	013400	001000	G E=190,C=70,B=38	
PHCAL	HD60753	21	0666	0732080	-502829	L	1	02528	LS	83123010	105922	000018	105539	000006	502 V 502$	
PHCAL	HD60753	21	0668	0732080	-502829	L	3	21918	LS	83123011	110531	000030	110225	000010	400 V 500$	
PHCAL	HD60753	21	0683	0732080	-502829	L	1	02502	L	83122617	000000	000000	171328	000006	502 V	
PHCAL	HD60753	21	0683	0732080	-502829	L	3	21886	L	83122617	000000	000000	171713	000010	500 V	
PHCAL	OO TFLOOD	99	0000	0732080	-502828	H	1	02003	S	83092002	024600	000025	000000	000000	G C=103,B=103	
PHCAL	OO WAVCAL	98	0000	0732080	-502828	H	1	02002	S	83092002	020300	000016	000000	000000	G E=100X,B=107	TFLOO
PHCAL	OO WAVCAL	98	0000	0732080	-502828	L	1	02001	S	83092001	013200	000001	000000	000000	G E=50X,B=110	TFLOO
PHCAL	HD 60753	21	0670	0732081	-502829	L	2	16785	L	83091401	000000	000000	011500	000031	G C=180,B=25	
PHCAL	HD 60753	21	0670	0732081	-502829	L	1	02142	L	83102603	000000	000000	035500	000026	G C=200,B=40	
PHCAL	HD 60753	21	0670	0732081	-502829	L	3	21045	L	83091400	000000	000000	004000	000041	G C=200,B=18	
PHCAL	HD 60753	21	0670	0732081	-502829	L	1	01998	L	83091923	000000	000000	234200	000005	G C=90,B=35	
PHCAL	HD 60753	21	0670	0732081	-502829	L	1	02046	L	83101509	000000	000000	091500	000006	G C=180,B=35	
PHCAL	HD 60753	21	0670	0732081	-502829	L	2	16786	L	83091402	000000	000000	021000	000009	G C=100,B=22	
PHCAL	HD 60753	21	0670	0732081	-502829	L	2	16787	L	83091402	000000	000000	024100	000038	G C=220,B=26	
PHCAL	HD 60753	21	0670	0732081	-502829	L	1	02000	L	83092000	000000	000000	005700	000026	G C=195,B=35	
PHCAL	HD 60753	21	0670	0732081	-502829	L	2	17181	L	83121607	000000	000000	072000	000031	G C=200,B=32	
PHCAL	HD 60753	21	0670	0732081	-502829	L	2	17180	L	83121606	000000	000000	063300	000007	G C=160,B=21	
PHCAL	HD 60753	21	0670	0732081	-502829	L	3	21044	L	83091400	000000	000000	000800	000016	G C=100,B=17	
PHCAL	HD 60753	21	0670	0732081	-502829	L	1	02047	L	83101509	000000	000000	094600	000026	G C=195,B=40	

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT	
PHCAL	HD	60753	21	0670	0732081	-502829	L	1 01997	L	83091922	000000	000000	223000	000026	G C=200,B=35
PHCAL	HD	60753	21	0670	0732081	-502829	L	1 01980	L	83081914	000000	000000	142800	000006	G C=190,B=33
PHCAL	HD60753		21	0683	0732081	-502829	L	1 02432	L	83121913	000000	000000	135751	000006 501	V
PHCAL	HD	60753	21	0670	0732081	-502829	L	2 16948	L	83100811	000000	000000	115400	000031	G C=210,B=25
PHCAL	HD	60753	21	0670	0732081	-502829	L	3 21256	L	83100811	000000	000000	114400	000041	G C=190,B=21
PHCAL	HD	60753	21	0670	0732081	-502829	L	2 16947	SL	83100810	105100	000021	104600	000007	G C=155,B=23
PHCAL	HD	60753	21	0670	0732081	-502829	L	3 21255	SL	83100810	104100	000030	103500	000010	G C=155,B=20
PHCAL	HD60753		21	0682	0732081	-502829	L	3 21808	L	83121913	000000	000000	135528	000010 500	V
PHCAL	HD	60753	21	0670	0732081	-502829	L	2 16788	L	83091403	000000	000000	031000	000013	G C=120,B=26
PHCAL	HD	60753	21	0670	0732081	-502829	L	3 21041	L	83091322	000000	000000	220600	000041	G C=190,B=18
PHCAL	HD	60753	20	0670	0732081	-502829	L	3 21651	L	83120107	000000	000000	075700	000010	G C=170,B=17
PHCAL	HD	60753	21	0670	0732081	-502829	L	3 20690	SL	83081413	131300	000030	130900	000010	G C=240,B=17
PHCAL	HD	60753	21	0670	0732081	-502829	L	3 21208	L	83100113	000000	000000	130300	000010	G C=180,B=20
PHCAL	HD	60753	21	0670	0732081	-502829	L	2 16589	SL	83081413	132300	000021	131700	000007	G C=175,B=22
PHCAL	HD	60753	20	0670	0732081	-502829	L	1 02344	L	83120108	000000	000000	082300	000006	G C=200,B=32
PHCAL	HD	60753	20	0670	0732081	-502829	L	3 21652	L	83120108	000000	000000	085900	000041	G C=200,B=20
PHCAL	HD	60753	21	0670	0732081	-502829	L	2 16907	L	83100113	000000	000000	133000	000007	G C=180,B=23
PHCAL	HD	60753	20	0670	0732081	-502829	L	1 02345	L	83120109	000000	000000	092700	000026	G C=200,B=37
PHCAL	HD	60753	21	0670	0732081	-502829	L	1 01999	L	83092000	000000	000000	001900	000031	G C=220,B=35
PHCAL	HD	60753	21	0670	0732081	-502829	L	3 21043	L	83091323	000000	000000	232200	000049	G C=220,B=18
FI158	HD60753		21	0678	0732081	-502829	L	3 20721	L	83081923	000000	000000	232911	000010 500	V
PHCAL	HD	60753	21	0670	0732081	-502829	L	2 16789	L	83091403	000000	000000	033800	000031	G C=200,B=28
PHCAL	HD	60753	21	0670	0732081	-502829	L	3 21042	L	83091322	000000	000000	224100	000012	G C=85,B=18
BEFPB	HD	60855	26	0570	0733459	-142251	H	3 21915	L	83123007	000000	000000	075700	000425	G C=180,B=34
CCFTS	HD	61110	41	0490	0735543	+344203	L	3 21482	L	83110820	000000	000000	203700	006000	G E=99,C=12X,B=22
LGFRH	HD	61338	49	0510	0736354	+174724	L	2 16953	L	83100907	000000	000000	073900	000600	G E=198,C=80,B=22
CSFTA	00	WAVCAL	98	0030	0736411	+052116	H	3 21197	S	83093009	095900	000018	000000	000000	G E=8X,B=110 TFL00
CSFTA	HD	61421	41	0030	0736411	+052116	H	3 21196	L	83093008	000000	000000	083400	006000	G E=226,C=20,B=175
CSFTA	HD	61421	41	0030	0736411	+052116	L	3 21198	L	83093010	000000	000000	102900	000200	G E=117,C=10X,B=27
CSFTA	HD	61421	41	0030	0736411	+052116	H	3 21195	L	83093007	000000	000000	070800	006000	G E=192,C=20,B=120
CSFTA	HD	61421	41	0030	0736411	+052116	H	3 21194	L	83093005	000000	000000	054200	006000	G E=170,C=20,B=102
CSFTA	HD	61421	41	0030	0736411	+052116	L	3 21199	L	83093010	000000	000000	105900	000400	G E=198,C=20,B=43
QSFRM	PK0736+017		85	1640	0736424	+014359	L	2 17197	L	83123118	000000	000000	181100	042000	G C=137,B=90
FSFMG	00	YZ CMI	48	1120	0742030	+034032	L	3 21364	L	83102606	000000	000000	061200	006000	G B=90
FSFMG	00	YZ CMI	48	1120	0742030	+034015	L	1 02144	L	83102607	000000	000000	072000	002500	G E=234,B=92
FSFMG	00	YZ CMI	48	1120	0742030	+034015	L	3 21367	L	83102610	000000	000000	103900	002000	G E=88,B=85
FSFMG	00	YZ CMI	48	1120	0742030	+034015	L	3 21366	L	83102609	000000	000000	093900	002000	G E=128,C=124,B=124
FSFMG	00	YZ CMI	48	1120	0742030	+034015	L	1 02145	L	83102609	000000	000000	091600	001000	G E=167,B=105
FSFMG	00	YZ CMI	48	1120	0742030	+034015	L	3 21365	L	83102607	000000	000000	075700	006000	G B=210
CCFJL	HD	62509	47	0110	0742155	+280855	L	1 02328	L	83112808	000000	000000	081900	000003	G E=227,C=160,B=33
CCFJL	HD	62509	47	0110	0742155	+280855	L	1 02329	L	83112808	000000	000000	085100	000010	G E=2..5X,C=2X,B=35
CCFJL	HD	62509	47	0110	0742155	+280855	L	3 21632	L	83112805	000000	000000	051400	008000	G E=8X,B=155
CCFJL	00	WAVCAL	98	9999	0742155	+280855	H	1 02327	S	83112807	073300	000016	000000	000000	G E=100X,B=100 TFL00
CCFJL	00	WAVCAL	98	9999	0742155	+280855	H	3 21634	S	83112903	033200	000018	000000	000000	G E=100X,B=100 TFL00
CCFJL	HD	62509	47	0110	0742155	+280855	H	3 21633	L	83112809	000000	000000	095900	001000	G E=8X,B=155,EXP 1010

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
CCFJL	HD 62509	47	0110	0742155	+280855	H	1	02326	L	83112806	000000	000000	063800	000300	G	E=166,C=223,B=40
IGFBS	HD 63085	12	0910	0743449	-262211	H	3	21506	L	83111022	000000	000000	221400	016000	G	C=3X,B=70
IGFBS	HD 63425	23	0694	0745259	-412247	H	3	21679	L	83120405	000000	000000	054100	001000	G	C=1.5X,B=60
OBFGS	HD 63462	20	0450	0746003	-254842	H	3	20838	L	83082914	000000	000000	140200	000052	G	C=220,B=42
QSFMS	Q 0754+100	87	0000	0754226	+100439	L	2	16932	L	83100603	000000	000000	034100	013000	G	C=100,B=40
QSFMS	Q 0754+100	87	0000	0754226	+100439	L	3	21242	L	83100523	000000	000000	233700	024000	G	C=83,B=45
FA179	HD65456	30	0495	0755404	-301156	L	3	20733	LS	83082020	203024	000300	201938	000240	500 V	600$TRAIL LAP R=0.125 1 P
FA179	HD65456	30	0496	0755404	-301156	L	2	16632	LS	83082020	204309	000050	203657	000032	402 V	502$TRAIL LAP R=0.625 1 P
CBFMP	HD 65607	66	0820	0756500	-072200	L	3	21464	L	83110704	000000	000000	045400	004500	G	E=114,C=61,B=40
CBFMP	HD 65607	66	0820	0756500	-072200	L	1	02237	L	83110704	000000	000000	042500	001500	G	E=241,C=170,B=40
IGFBS	HD 66665	20	0780	0802078	+061943	H	3	21680	L	83120406	000000	000000	062600	001500	G	C=2X,B=90
XQFRG	PG0804+762	85	1450	0804354	+761132	L	2	16666	L	83082509	000000	000000	091100	003800	G	C=140,B=68
PHCAL	BD+75 325	16	0948	0804429	750647	L	3	21034	L	83091314	145251	000018	144804	000018	501 V	2 EXP.REF PT:-5,-211 ; -2
PHCAL	BD+75 325	16	0948	0804429	750647	L	3	21035	L	83091315	152540	000018	152107	000018	501 V	2 EXP.REF PT:-5,-211 ; -2
PHCAL	BD+75/325	16	0947	0804429	750647	L	2	16784	L	83091317	171641	000018	171324	000018	401 V	2 EXP.REF PT:-5,-211 ; -2
PHCAL	BD+75 325	16	0951	0804429	750647	L	3	21036	L	83091315	155800	000018	155422	000018	501 V	2 EXP.REF PT:-5,-211 ; -2
PHCAL	BD+75 325	16	0947	0804429	750647	L	2	16783	L	83091316	164233	000018	163843	000018	401 V	TWO EXPOSURES WITH REF.PT
PHCAL	BD+75 325	16	0945	0804430	750648	L	2	16759	L	83090919	000000	000000	192048	000024	502 V	
PHCAL	BD+75 325	16	0956	0804430	750648	L	3	20992	L	83090919	000000	000000	190009	000014	501 V	
PHCAL	BD+75 325	16	0945	0804430	750648	L	1	02501	L	83122615	000000	000000	155110	000107	502 V	TRAILED R=0.30 I=1
PHCAL	BD+75325	16	0957	0804430	750648	L	3	21901	LS	83122817	173727	000042	173323	000014	501 V	501$
PHCAL	BD+75 325	16	0952	0804430	750648	L	3	21090	L	83091821	000000	000000	210710	000014	500 V	
PHCAL	BD+75 325	16	0949	0804430	750648	L	1	02499	L	83122614	000000	000000	141409	000020	502 V	
PHCAL	BD+75325	16	0949	0804430	750648	L	3	21714	LS	83120714	144610	000042	144122	000014	V	$ERROR IN PREP. IMAGE
PHCAL	BD+75 325	16	0944	0804430	750648	L	3	21715	LS	83120715	152606	000042	152124	000014	500 V	600$
PHCAL	BD+75 325	16	0954	0804430	750648	L	1	02500	L	83122615	000000	000000	151550	000020	503 V	
PHCAL	BD+75 325	16	0948	0804430	750648	L	2	16824	L	83091821	000000	000000	210336	000024	502 V	
PHCAL	BD+75325	16	0957	0804430	750648	L	3	21900	LS	83122816	163742	000042	163415	000014	501 V	501$
PHCAL	BD+75 325	16	0952	0804430	750648	L	1	02362	LS	83120714	143646	000100	143234	000020	502 V	502$
PHCAL	BD+75 325	16	0957	0804430	750648	L	3	21884	L	83122614	000000	000000	141812	000014	500 V	
PHCAL	BD+75 325	16	0956	0804430	750648	L	3	21885	L	83122615	000000	000000	151944	000014	500 V	
PHCAL	BD+75325	16	0952	0804430	750648	L	1	02519	LS	83122817	172929	000100	172620	000020	503 V	603$
PHCAL	BD+75 325	16	0945	0804430	750648	L	1	02529	LS	83123012	121705	000100	121212	000020	402 V	402$
PHCAL	BD+75 325	16	0949	0804430	750648	L	3	21919	LS	83123012	122557	000042	122241	000014	400 V	400$
FA074	BD+75325	16	0945	0804430	750648	L	1	02518	LS	83122816	163031	000100	162721	000020	502 V	602$
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	2	16617	L	83081810	000000	000000	104600	000114	G	C=165,B=25
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	3	20709	L	83081810	000000	000000	103603	000043	G	C=160,B=20
HSFCW	BD+75 0325	16	0950	0804432	+750648	L	1	02453	L	83122104	000000	000000	041000	000020	G	C=190,B=32
HSFCW	BD+75 0325	16	0950	0804432	+750648	L	3	21831	L	83122104	000000	000000	042000	000014	G	C=180,B=25
HSFCW	BD+75 0325	16	0950	0804432	+750648	L	3	21878	L	83122607	000000	000000	070300	000026	G	C=2.0X,B=25
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	3	21501	SL	83111009	095400	000042	095900	000014	G	C=200,B=16
HSFCW	BD+75 0325	16	0950	0804432	+750648	L	3	21879	L	83122608	000000	000000	080500	000026	G	C=2X,B=25
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	1	02251	SL	83111009	094000	000100	094500	000020	G	C=230,B=40
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	2	17170	SL	83112909	095800	000112	095300	000024	G	C=160,B=23
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	2	16950	L	83100813	000000	000000	134400	000114	G	C=170,B=24

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT	
HSFCW	BD+75 0325	16	0950	0804432	+750648	L	1	02494	L	83122608	000000	000000	080900	000058	G C=3X,B=38
HSFCW	BD+75 0325	16	0950	0804432	+750648	L	1	02452	L	83122102	000000	000000	025200	000114	G C=180,B=38
HSFCW	BD+75 0325	16	0950	0804432	+750648	L	3	21833	L	83122106	000000	000000	062700	000016	G C=182,B=20
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	2	16905	L	83100111	000000	000000	112600	000024	G C=185,B=25
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	3	21206	L	83100111	000000	000000	113000	000014	G C=180,B=20
HSFCW	BD+75 0325	16	0950	0804432	+750648	L	1	02454	L	83122105	000000	000000	052600	000042	G C=2X,B=38
HSFCW	BD+75 0325	16	0950	0804432	+750648	L	3	21832	L	83122105	000000	000000	053100	000016	G C=180,B=20
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	2	16714	SL	83090114	142100	000112	142600	000024	G C=212,B=27
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	3	20716	L	83081911	000000	000000	114400	000014	G C=150,B=16
HSFCW	BD+75 0325	16	0950	0804432	+750648	L	1	02455	L	83122106	000000	000000	062200	000042	G C=2X,B=35
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	3	20654	L	83081013	000000	000000	130400	000014	G C=170,B=15
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	2	16564	L	83081012	000000	000000	125700	000024	G C=180,B=22
HSFCW	BD+75 0325	16	0950	0804432	+750648	L	3	21830	L	83122103	000000	000000	031000	000052	G C=180,B=20
PHCAL	BD+75 0325	16	0950	0804432	+750648	L	1	01977	L	83081911	000000	000000	113900	000020	G C=170,B=33
HSFCW	BD+75 0325	16	0950	0804432	+750648	L	1	02493	L	83122607	000000	000000	070800	000058	G C=3X,B=40
PHCAL	BD +75 325	16	0954	0804433	+750647	L	1	02015	L	83100213	000000	000000	131800	000020	G C=185,B=35
PHCAL	BD +75 325	16	0954	0804433	+750647	L	3	21215	L	83100213	000000	000000	133400	000014	G C=165,B=20
PHCAL	OD TFLOOD	99	0000	0804433	+750647	H	2	16904	S	83100110	104300	000007	000000	000000	G B=125
PHCAL	OD WAVCAL	98	0000	0804433	+750647	H	2	16903	S	83100110	101500	000016	000000	000000	G E=50X,B=122 TFLOO
PHCAL	OD WAVCAL	98	0000	0804433	+750647	L	2	16902	S	83100109	095100	000001	000000	000000	G E=10X,B=80 TFLOO
PHCAL	OD TFLOOD	99	0000	0804433	+750647	H	3	21205	S	83100109	092400	000005	000000	000000	G B=112
PHCAL	OD WAVCAL	98	0000	0804433	+750647	H	3	21204	S	83100108	085600	000200	000000	000000	G E=50X,B=125 TFLOO
PHCAL	OD WAVCAL	98	0000	0804433	+750647	L	1	02009	S	83100106	063000	000001	000000	000000	G E=10X,B=105 TFLOO
PHCAL	OD TFLOOD	99	0000	0804433	+750647	H	1	02011	S	83100107	074200	000025	000000	000000	G B=100
PHCAL	OD WAVCAL	98	0000	0804433	+750647	H	1	02010	S	83100106	070000	000016	000000	000000	G E=50X,B=105 TFLOO
PHCAL	BD +75 325	16	9999	0804433	+750647	D	9	01477	L	83100212	000000	000000	124900	016000	G NO COMMENTS
PHCAL	OD WAVECAL	98	9999	0804434	+750648	L	3	21203	S	83100108	083000	000002	000000	000000	G E=10X,B=100 TFLOO
OD05K	OD SU UMA	54	1400	0808048	+624528	L	3	21032	L	83091308	000000	000000	085400	010000	G E=255,C=180,B=100
OD05K	OD SU UMA	54	1400	0808048	+624528	L	2	16782	L	83091310	000000	000000	103700	007000	G B=105
FC231	HD68808	53	0612	0810256	-462936	L	1	02157	L	83102721	000000	000000	213928	000400	702 V
FC231	HD68808	53	0613	0810256	-462936	L	3	21379	L	83102719	000000	000000	193508	012000	501 V
ZAFMK	OD RX PUP	57	1100	0812282	-413318	L	1	02176	L	83102923	000000	000000	232900	001500	G E=2X,C=110,B=38
ZAFMK	OD RX PUP	57	1100	0812282	-413318	H	3	21402	L	83102923	000000	000000	235200	024000	G E=3X,C=125,B=70
ZAFMK	OD RX PUP	57	1100	0812282	-413318	H	1	02177	L	83103003	000000	000000	035800	008500	G E=146,C=85,B=53
ZAFMK	OD RX PUP	57	1100	0812282	-413318	L	3	21403	L	83103005	000000	000000	052900	001500	G E=172,C=20,B=20
LGFEB	HD 69267	47	0350	0813483	+092028	L	3	21268	L	83101103	000000	000000	033800	024000	G E=202,C=95,B=75
FA141	HD70084	22	0709	0816266	-465606	H	3	20860	L	83083101	000000	000000	011224	003500	701 V
QSFDW	NG 1068	84	1330	0819306	+731004	L	3	21735	L	83120923	000000	000000	235800	012000	G C=200,B=165
CVFJR	OD Z CAM	54	1090	0819398	+731623	L	3	21721	L	83120805	000000	000000	054100	000400	G C=158,B=30
CVFJR	OD Z CAM	54	1090	0819398	+731623	L	1	02368	L	83120806	000000	000000	061900	000250	G C=198,B=70
ZAFPS	OD Z CAM	54	1170	0819399	+731624	L	3	21753	L	83121204	000000	000000	041500	002000	G C=220,B=18
ZAFPS	OD Z CAM	54	1170	0819399	+731624	L	1	02393	L	83121204	000000	000000	045200	001200	G C=195,B=38
ZAFPS	OD Z CAM	54	1170	0819399	+731624	L	1	02392	L	83121203	000000	000000	034000	001200	G C=205,B=35
ZAFPS	OD Z CAM	54	1170	0819399	+731624	L	3	21755	L	83121206	000000	000000	063900	002000	G C=185,B=25
ZAFPS	OD Z CAM	54	1170	0819399	+731624	L	3	21754	L	83121205	000000	000000	052600	002000	G C=180,B=18

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT	
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	3	21738	L	83121005	000000	000000	051100	000900	G E=205,C=210,B=38
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	1	02378	L	83121005	000000	000000	054500	000500	G C=215,B=80
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	3	21737	L	83121003	000000	000000	035200	000900	G E=208,C=200,B=23
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	1	02377	L	83121004	000000	000000	043500	000500	G C=199,B=43
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	1	02395	L	83121207	000000	000000	071800	001400	G C=220,B=50
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	3	21739	L	83121006	000000	000000	061700	000600	G E=176,C=180,B=80
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	1	02379	L	83121006	000000	000000	065100	000500	G C=230,B=105
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	1	02381	L	83121009	000000	000000	092000	000500	G C=180,B=38
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	3	21741	L	83121008	000000	000000	084700	000800	G E=189,C=182,B=22
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	3	21756	L	83121207	000000	000000	075000	002000	G C=175,B=23
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	1	02397	L	83121209	000000	000000	093400	001000	G C=160,B=35
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	1	02376	L	83121003	000000	000000	032000	000800	G C=2X,B=60
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	3	21736	L	83121003	000000	000000	030400	001000	G E=226,C=255,B=35
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	1	02396	L	83121208	000000	000000	082700	001400	G C=205,B=40
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	1	02394	L	83121206	000000	000000	060700	001400	G C=218,B=38
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	3	21740	L	83121007	000000	000000	072300	000700	G E=224,C=205,B=85
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	1	02380	L	83121008	000000	000000	081600	000500	G C=195,B=62
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	3	21752	L	83121203	000000	000000	031300	002000	G C=217,B=18
ZAFPS	00 Z CAM	54	1170	0819399	+731624	L	3	21757	L	83121209	000000	000000	090100	002000	G C=160,B=18
AFFJL	HD 70958	40	0560	0822055	-033516	L	3	21572	L	83111804	000000	000000	040500	015000	G E=214,C=10X,B=115
AFFJL	HD 70958	40	0560	0822055	-033516	H	1	02287	L	83111807	000000	000000	070800	003000	G C=2X,B=2X
HHFRS	00 HH47	76	1700	0824228	-505000	L	1	02158	L	83102722	000000	000000	224600	040000	G E=3-5X,C=220,B=180
HHFRS	00 HH47	76	1700	0824228	-505000	L	3	21389	L	83102822	000000	000000	223400	044000	G C=100,B=70
BLFAG	Q 0829+046	87	1650	0829109	+043951	L	3	21259	L	83100902	000000	000000	025400	017600	G C=85,B=59
AFFJL	HD 72291	40	0620	0830096	+363627	H	1	02263	L	83111323	000000	000000	234400	003500	G E=107,C=223,B=36
AFFJL	HD 72291	40	0620	0830096	+363627	L	3	21537	L	83111320	000000	000000	203900	018000	G E=144,C=5-10X,B=55
FC231	HD73502	53	0781	0835176	-435621	L	1	02140	L	83102515	000000	000000	151635	001800	401 V
FC231	HD73502	53	0782	0835176	-435621	L	3	21359	L	83102514	000000	000000	142956	004000	100 V
FC231	HD73678	53	0833	0836034	-471110	L	3	21360	L	83102516	000000	000000	160353	006000	100 V
FA009	HD73666	22	0670	0837191	200856	L	1	02116	L	83102315	000000	000000	152542	000012	402 V
FA009	HD73666	22	0676	0837191	200856	L	1	02115	L	83102314	000000	000000	141751	000045	703 V
FA009	HD73666	22	0676	0837191	200856	L	3	21333	LS	83102314	145200	000100	144820	000100	500 V 400$
OBFGS	HD 74195	21	0362	0838515	-524436	H	3	21415	L	83103110	000000	000000	105300	000038	G C=210,B=40
OBFGS	HD 74195	21	0362	0838515	-524436	H	1	02187	L	83103110	000000	000000	104800	000020	G C=187,B=42
CBFMP	HD 74307	66	0840	0841050	+191253	L	3	21446	L	83110408	000000	000000	084000	000430	G C=220,B=25
CBFMP	HD 74307	66	0840	0841050	+191253	L	1	02213	L	83110408	000000	000000	085000	000300	G C=2X,B=40
CSFHJ	HD 75021	50	0710	0844310	-293239	L	1	02514	L	83122808	000000	000000	084300	006000	G C=120,B=41
LGFRH	HD 75156	49	0650	0845547	+124358	L	2	16952	L	83100906	000000	000000	062400	003500	G C=80,B=30
PHCAL	00 WAVCAL	98	0000	0849290	+323945	H	2	17179	S	83121605	053400	000016	000000	000000	G E=50X,B=144 TFL00
PHCAL	00 WAVCAL	98	0000	0849295	+323945	L	1	02419	S	83121602	025300	000001	000000	000000	G E=10X,B=101 TFL00
PHCAL	00 WAVCAL	98	0000	0849295	+323945	L	3	21780	S	83121603	035300	000002	000000	000000	G E=10X,B=101 TFL00
PHCAL	00 WAVCAL	98	0000	0849295	+323945	H	3	21781	S	83121604	045700	000200	000000	000000	G E=50X,B=129 TFL00
PHCAL	00 SAFETY	99	0000	0849295	+323945	L	2	17177	S	83121604	041000	000000	000000	000000	G C=40,B=12
PHCAL	00 WAVCAL	98	0000	0849295	+323945	L	2	17178	S	83121605	051000	000001	000000	000000	G E=10X,B=82 TFL00
PHCAL	00 WAVCAL	98	0000	0849295	+323945	H	1	02420	S	83121603	032600	000016	000000	000000	G E=50X,B=111 TFL00

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
BLFAG	OOSKY BKGD	07	9999	0851569	+201757	L	1	02364	L	83120719	000000	000000	192900	007000		G B=41
BLFAG	Q 0851+202	88	1430	0851573	+201759	L	3	21717	L	83120719	000000	000000	191400	012000		G C=70,B=34
BLFAG	Q 0851+202	88	1430	0851573	+201759	L	3	21262	L	83100923	000000	000000	230900	020000		G C=95,B=42
BLFAG	OOSKY BKGR	07	9999	0851573	+201759	L	1	02022	L	83100923	000000	000000	231800	015000		G B=44
BLFAG	OO OJ 287	88	9999	0851573	+201759	L	1	02023	L	83101002	000000	000000	023300	019000		G C=210,B=80
BLFAG	OOSKY BKGD	07	9999	0851573	+201759	L	3	21263	L	83101002	000000	000000	025900	013500		G B=40
IGFJS	HD 76968	13	0710	0855536	-503320	H	2	16535	L	83080603	000000	000000	031400	003000		G C=2X,B=42
IGFJS	HD 76968	13	0710	0855536	-503320	H	3	20621	L	83080602	000000	000000	023200	003700		G C=245,B=45
FI158	HD77581	59	0716	0900132	-402125	L	3	20718	L	83081919	000000	000000	193300	001145	501	V
QSFRM	PG0906+484	85	1610	0906452	+482556	L	3	21921	L	83123023	000000	000000	234500	022000		G E=1.5X,C=100,B=62
QSFRM	PG0906+484	85	1610	0906452	+482556	L	1	02531	L	83123019	000000	000000	190600	027000		G C=165,B=80
SGFAU	HD 79186	24	0500	0909154	-443945	L	2	16658	L	83082413	000000	000000	133100	000005		G C=230,B=22
SGFAU	HD 79186	24	0500	0909154	-443945	L	2	16622	L	83081817	000000	000000	173800	000005		G C=240,B=22
SGFAU	HD 79186	24	0500	0909154	-443945	L	3	20825	L	83082814	000000	000000	143200	000018		G C=240,B=17
SGFAU	HD 79186	24	0500	0909154	-443945	L	2	16724	L	83090309	000000	000000	092700	000005		G C=215,B=25
SGFAU	HD 79186	24	0500	0909154	-443945	L	3	20898	L	83090309	000000	000000	093200	000107		G C=255,B=26
SGFAU	HD 79186	24	0500	0909154	-443945	L	3	20616	L	83080514	000000	000000	143400	000018		G C=210,B=15
SGFAU	HD 79186	24	0500	0909154	-443945	L	3	20768	L	83082413	000000	000000	132600	000018		G C=230,B=17
SGFAU	HD 79186	24	0500	0909154	-443945	L	2	16688	L	83082814	000000	000000	143600	000005		G C=250,B=22
SGFAU	HD 79186	24	0500	0909154	-443945	L	3	20658	L	83081017	000000	000000	172000	000018		G C=220,B=18
SGFAU	HD 79186	24	0500	0909154	-443945	L	2	16567	L	83081017	000000	000000	172400	000005		G C=230,B=22
SGFAU	HD 79186	24	0500	0909154	-443945	L	3	20691	L	83081414	000000	000000	142200	000018		G C=220,B=15
SGFAU	HD 79186	24	0500	0909154	-443945	L	2	16590	L	83081414	000000	000000	142700	000005		G C=240,B=22
FA050	HD79469	22	0409	0911457	023133	H	1	02175	L	83102921	000000	000000	212653	000120	503	V
FA050	HD79469	22	0408	0911457	023133	H	3	21401	L	83102920	000000	000000	205453	000300	501	V
FA050	HD79469	22	0410	0911457	023133	L	1	02174	LS	83102920	202835	000003	202515	000002	703	V 703$
FA050	HD79469	22	0408	0911457	023133	L	3	21400	LS	83102920	202136	000006	201755	000006	700	V 500$
OD14K	HD 79469	36	0390	0911458	+023135	L	3	21788	SL	83121707	074100	000010	074500	000020		G C=2X,B=19
OD14K	HD 79469	36	0390	0911458	+023135	L	2	17191	SL	83121708	081500	000005	082000	000010		G C=220,B=23
OD14K	HD 79469	36	0390	0911458	+023135	L	3	21789	SL	83121708	082400	000004	082900	000004		G C=105,B=17
OD14K	HD 79469	30	0390	0911458	+023135	H	3	21790	L	83121709	000000	000000	091300	000400		G C=1.1X,B=41
HSFCW	OOA+81 266	16	1210	0913428	+815611	L	1	02474	L	83122308	000000	000000	081400	000803		G C=2.5X,B=35
HSFCW	OOA+81 266	16	1210	0913428	+815611	L	3	21877	L	83122605	000000	000000	053800	000724		G C=190,B=40
HSFCW	OOA+81 266	16	1210	0913428	+815611	L	3	21852	L	83122307	000000	000000	070500	000200		G C=180,B=20
HSFCW	OOA+81 266	16	1210	0913428	+815611	L	1	02479	SL	83122400	010400	000606	005400	000303		G C=190,B=30
HSFCW	OOA+81 266	16	1210	0913428	+815611	L	3	21858	L	83122400	000000	000000	004300	000344		G C=1.9X,B=18
HSFCW	OOA+81 266	16	1210	0913428	+815611	L	1	02475	L	83122309	000000	000000	093300	000803		G C=2.5X,B=35
HSFCW	OOA+81 266	16	1210	0913428	+815611	L	1	02473	L	83122307	000000	000000	071000	000303		G C=205,B=35
HSFCW	OOA+81 266	16	1210	0913428	+815611	L	3	21853	L	83122308	000000	000000	080400	000344		G C=1.5X,B=23
HSFCW	OOA+81 266	16	1210	0913428	+815611	L	3	21854	SL	83122309	092200	000400	091000	000200		G C=188,B=25
FC231	HD81222	53	0791	0920454	-554447	L	3	21361	L	83102521	000000	000000	210718	004000	200	V
MLFJL	HD 81797	47	0198	0925077	-082626	H	1	02288	L	83111808	000000	000000	083800	000400		G E=157,C=120,B=85
MLFJL	HD 81797	47	0198	0925077	-082626	H	1	02290	L	83111810	000000	000000	101500	005000		G E=2X,C=200,B=100
MLFJL	HD 81797	47	0198	0925077	-082626	H	1	02289	L	83111809	000000	000000	091900	001500		G E=2X,C=200,B=140
MLFJL	HD 81797	47	0198	0925077	-082626	L	3	21573	L	83111809	000000	000000	094000	007000		G E=217,C=150,B=100

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
MGFLH	HD 81809	44	0538	0925181	-055107	H	1	02221	L	83110504	000000	000000	040400	008000		G E=224,C=2X,B=80
CCFTS	HD 82328	41	0320	0929315	+515423	L	3	21478	L	83110808	000000	000000	082300	002000		G E=66,C=4-5X,B=37
CCFTS	HD 82328	41	0320	0929315	+515423	L	3	21485	L	83110902	000000	000000	024700	006000		G C=20X,B=23
CCFDS	HD 82443	44	0700	0929499	+271250	H	1	02106	L	83102207	000000	000000	073400	013000		G E=2X,C=1.5X,B=179
FC109	HD81817	46	0455	0929580	813230	L	3	21079	L	83091715	000000	000000	155729	025000	112	V NO SPECTRUM BY UNKNOWN RE
FC109	HD81817	46	0450	0929580	813230	L	3	21111	L	83092014	000000	000000	144537	017400	332	V
FC109	HD81817	46	0446	0929580	813230	H	2	16817	L	83091720	000000	000000	201044	006000	243	V
MGFLH	HD 82885	44	0540	0932400	+360215	L	1	02418	L	83121601	000000	000000	015000	000030		G C=143,B=35
GHFFB	OO GD 299	16	1220	0934500	+551918	L	3	21866	L	83122501	000000	000000	014700	000200		G C=127,B=20
FE088	NULL	99	9999	0957572	560817	L	1	02524		83122900	000000	000000	000000	000000	000	V G-1 CUTOFF LWP2525
FE088	0957+56 AB	85	1700	0957572	560817	L	1	02525	L	83122911	000000	000000	113139	036600	345	V
FE088	FLATFIELD	99	9999	0957573	560818	L	1	02523		83122910	105619	000122	000000	000000	116	V 40 % TFLOOD TO READ RESID
QSFAD	000957+561	85	0000	0957574	+560818	L	1	02417	L	83121521	000000	000000	211400	024000		G E=222,C=195,B=160
CVFJP	OO OY CAR	54	1600	1005168	-695924	L	3	21565	L	83111621	000000	000000	212600	038500		G C=135,B=105
IGFBS	HD 88115	23	0830	1005591	-622430	H	3	21526	L	83111303	000000	000000	033100	007000		G C=230,B=45
AFFJL	HD 88215	41	0530	1007396	-123405	L	3	21538	L	83111400	000000	000000	005800	012000		G E=178,C=5-10X,B=55
FA081	IC2553	70	1134	1007472	-622202	L	3	20589	L	83080218	000000	000000	184703	012000	571	V
LDFBH	OO GL 380	46	0660	1008143	+494213	L	1	02403	L	83121308	000000	000000	084600	000300		G E=169,C=60,B=35
EGFJH	OO MK 26	88	1570	1008263	+590812	L	3	21411	L	83103023	000000	000000	231700	039000		G C=160,B=130
FA255	HD88661	26	0570	1010017	-574848	H	3	21040	L	83091321	000000	000000	210511	000430	501	V
FA255	HD88661	26	0571	1010017	-574900	H	3	20991	L	83090917	000000	000000	173438	000430	500	V
FI066	PG1012-029	54	1480	1012372	-025334	L	3	21533	L	83111315	000000	000000	151356	004000	231	V TARGET 29CTS(SO) IN R.P.
FI066	PG 1012-29	54	1480	1012372	-025334	L	3	21534	L	83111316	000000	000000	164539	004000	241	V
FI066	PG1012-29	54	1480	1012372	-025334	L	3	21536	L	83111318	000000	000000	185300	005400	342	V
FI066	PG1012-29	54	1480	1012372	-025334	L	3	21535	L	83111317	000000	000000	174932	004000	241	V
FI066	PG1012-29	54	1480	1012372	-025334	L	1	02262	L	83111316	000000	000000	160025	004000	331	V
FSFMG	OO AD LEO	48	0940	1016527	+200716	L	3	21369	L	83102613	000000	000000	133700	001300		G E=49,C=20,B=20
FSFMG	OO AD LEO	48	0940	1016527	+200716	L	3	21368	L	83102612	000000	000000	121200	006000		G E=61,B=50
MGFLH	HD 89744	41	0580	1019127	+412903	H	1	02222	L	83110506	000000	000000	063800	006000		G E=142,C=2X,B=87
FE137	NGC3227	84	1320	1020468	200706	L	1	02416	L	83121515	000000	000000	150434	016300	454	V
FE137	NGC 3227	84	1324	1020468	200706	L	3	21778	L	83121511	000000	000000	111601	021000	232	V
BEFPB	HD 91120	26	0560	1028323	-131952	H	3	21916	L	83123008	000000	000000	083600	002000		G C=230,B=41
IGFJS	HD 91452	13	0750	1030085	-634058	H	3	20622	L	83080604	000000	000000	040100	013000		G C=1.5X,B=62
IGFJS	HD 91452	13	0750	1030085	-634058	H	2	16536	L	83080606	000000	000000	061600	005500		G C=1.5X,B=43
OBFGS	HD 91465	21	0332	1030144	-612539	H	3	20806	L	83082613	000000	000000	130100	000037		G C=200,B=46
HSFTS	HD 91465	26	0360	1030145	-612540	H	3	20677	L	83081315	000000	000000	152900	000140		G C=3X,B=62
HSFTS	HD 91465	26	0360	1030145	-612540	H	3	21690	L	83120504	000000	000000	045500	000120		G C=1.5X,B=55
HSFTS	HD 91465	26	0360	1030145	-612540	H	3	20676	L	83081314	000000	000000	145300	000100		G C=1.5X,B=43
HSFTS	HD 91465	26	0360	1030145	-612540	H	3	21161	L	83092507	000000	000000	073500	000100		G C=255,B=42
HSFTS	HD 91465	26	0360	1030145	-612540	H	3	21382	L	83102807	000000	000000	073800	000100		G C=1.5X,B=45
HSFTS	HD 91465	26	0360	1030145	-612540	H	3	21162	L	83092508	000000	000000	080600	000140		G C=3X,B=65
HSFTS	HD 91465	26	0360	1030145	-612540	H	3	21383	L	83102808	000000	000000	080700	000140		G C=3X,B=70
HSFTS	HD 91465	26	0360	1030145	-612540	H	3	21689	L	83120504	000000	000000	042900	000050		G C=250,B=40
OBFBS	HD 303068	20	0976	1032529	-575323	L	2	16996	L	83111305	000000	000000	052400	000230		G C=1X,B=25
OBFBS	HD 303068	20	0976	1032529	-575323	L	3	21527	L	83111305	000000	000000	053000	000400		G C=1.5X,B=18

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
OBFBS	HD 91824	12	0871	1032529	-575323	L	2	16997	L	83111306	000000	000000	064300	000020		G C=200,B=25
OBFBS	HD 91824	12	0871	1032529	-575323	L	3	21528	L	83111306	000000	000000	064700	000020		G C=165,B=15
OBFBS	HD 91943	23	0670	1033473	-575600	L	3	21514	L	83111111	000000	000000	111200	000009		G C=112,B=15
OBFBS	CP57 03506	23	0760	1033518	-575838	L	3	21529	L	83111308	000000	000000	080900	000035		G C=140,B=18
OBFBS	CP57 03506	23	0760	1033518	-575838	L	2	16998	L	83111308	000000	000000	080300	000026		G C=220,B=25
OBFBS	CP-57 3507	23	0927	1033519	-575701	L	3	21513	L	83111110	000000	000000	102500	000200		G C=1.5X,B=18
OBFBS	CP-57 3507	23	0927	1033519	-575701	L	2	16995	L	83111110	000000	000000	102000	000120		G NO COMMENTS
OBFBS	OO T 86	20	1070	1033545	-575916	L	3	21530	L	83111309	000000	000000	092300	000930		G C=170,B=32
OBFBS	HD 92044	23	0825	1033545	-575916	L	2	17000	L	83111310	000000	000000	104000	000045		G C=200,B=25
OBFBS	OO T 86	20	1070	1033545	-575916	L	2	16999	L	83111309	000000	000000	090900	000700		G C=210,B=37
OBFBS	HD 91983	23	0860	1033595	-575953	L	3	21511	L	83111108	000000	000000	081300	000105		G C=165,B=18
OBFBS	HD 91983	23	0860	1033595	-575953	L	2	16993	L	83111108	000000	000000	081800	000100		G C=2X,B=27
OBFBS	CP57 03518	20	1070	1034000	-575805	L	3	21532	L	83111311	000000	000000	113700	000730		G C=160,B=15
OBFBS	CP57 03523	23	0800	1034077	-575738	L	2	16994	L	83111109	000000	000000	092200	000030		G C=225,B=25
OBFBS	CP57 03523	23	0800	1034077	-575738	L	3	21512	L	83111109	000000	000000	091600	000030		G C=150,B=18
OBFBS	HD 92044	23	0825	1034212	-580104	L	3	21531	L	83111310	000000	000000	104500	000110		G C=130,B=15
OBFBS	OO F 27	20	1130	1041497	-591747	L	2	16989	L	83111102	000000	000000	025600	002700		G C=1.3X,B=30
OBFBS	OO F 27	20	1130	1041497	-591747	L	3	21507	L	83111102	000000	000000	021500	003500		G C=180,B=18
OBFBS	OOTR 14-21	20	1130	1041497	-591747	L	3	21508	L	83111103	000000	000000	033900	001800		G C=167,B=20
OBFBS	OOTR 14-20	12	0961	1041542	-591655	L	2	16992	L	83111106	000000	000000	065300	000410		G C=1.2X,B=25
OBFBS	OOTR 14-20	12	0961	1041542	-591655	L	3	21510	L	83111106	000000	000000	061800	000430		G C=140,B=15
OBFBS	OOTR 14-21	20	1090	1041555	-591721	L	2	16990	L	83111104	000000	000000	041400	001500		G C=1.3X,B=27
OBFBS	OO F 6	20	1120	1042035	-591755	L	2	16991	L	83111105	000000	000000	053500	001300		G C=210,B=28
OBFBS	OO F 6	20	1120	1042035	-591755	L	3	21509	L	83111104	000000	000000	045900	001500		G C=180,B=18
FM069	TR16/112	12	0939	1043199	-592750	H	3	21895	L	83122710	000000	000000	104101	042600	604	V REFERENCE POINT:-5,-211
PHCAL	HD 93521	22	0700	1045336	+375004	L	3	21363	L	83102604	000000	000000	045000	000003		G C=170,B=10
PHCAL	HD 93521	12	0700	1045336	+375004	L	2	17169	L	83112909	000000	000000	091600	000003		G C=130,B=25
PHCAL	HD 93521	12	0700	1045336	+375004	L	1	02359	SL	83120609	093400	000009	091800	000011		G C=185,B=38
PHCAL	HD 93521	12	0700	1045336	+375004	L	3	21703	SL	83120609	093700	000009	092600	000012		G C=190,B=18
PHCAL	HD 93521	12	0700	1045336	+375004	L	3	21868	SL	83122504	045300	000009	044900	000003		G C=160,B=20
PHCAL	HD 93521	12	0700	1045336	+375004	L	1	02484	SL	83122504	050300	000009	045800	000003		G C=200,B=30
PHCAL	HD 93521	12	0700	1045336	+375004	H	3	21869	L	83122506	000000	000000	060000	000430		G C=175,B=30
PHCAL	HD 93521	12	0700	1045336	+375004	H	1	02485	L	83122506	000000	000000	061100	000350		G C=202,B=45
PHCAL	HD 93521	12	0700	1045336	+375004	L	3	21502	SL	83111011	112400	000009	112900	000003		G C=205,B=15
PHCAL	HD 93521	12	0700	1045336	+375004	L	1	02252	SL	83111011	111400	000009	111900	000003		G C=230,B=30
PHCAL	HD 93521	12	0700	1045336	+375004	L	3	21870	L	83122507	000000	000000	072300	000012		G E=166,C=185,B=25
PHCAL	HD 93521	12	0700	1045336	+375004	L	1	02486	L	83122507	000000	000000	071500	000011		G C=180,B=34
PHCAL	HD 93521	12	0700	1045336	+375004	L	1	02129	L	83102413	000000	000000	134900	000003		G C=190,B=32
IGFBS	HD 93840	23	0780	1046569	-463049	H	3	21525	L	83111301	000000	000000	015800	006000		G C=1.5X,B=48
IGFBS	HD 94493	23	0725	1051160	-603254	H	3	21505	L	83111020	000000	000000	204500	004500		G C=1.5X,B=52
FM167	AG CAR	23	0726	1054110	-601111	H	3	20742	L	83082118	000000	000000	185910	018000	572	V
MGFLH	HD 95735	48	0750	1100366	+361820	L	1	02223	L	83110508	000000	000000	083000	003000		G E=197,C=135,B=84
FE052	NGC 3516	84	1298	1103229	725022	L	3	21257	L	83100814	000000	000000	142517	026000	342	V 5+25+230 MIN;START:142517
FE052	NGC3516	84	1299	1103229	725022	L	1	02019	L	83100818	000000	000000	185703	015300	564	V 133+20 MIN;START 18:57:03
EA143	HD96548	11	0779	1104180	-651421	H	3	21807	L	83121912	000000	000000	122401	004000	450	V

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
FI094	HD96548	11	0781	1104180	-651421	H	3	20921	L	83090415	000000	000000	154037	004000	471	V
FI094	HD96548	11	0778	1104180	-651421	H	3	20923	L	83090418	000000	000000	180053	004000	451	V
FI094	HD96548	11	0778	1104180	-651421	H	3	20936	L	83090515	000000	000000	153503	004000	561	V
FI094	HD96548	11	0772	1104180	-651421	H	3	20906	L	83090315	000000	000000	152435	003500	452	V
FI094	HD96548	11	0781	1104180	-651421	H	3	20938	L	83090517	000000	000000	173820	004000	561	V
FA096	HD96548	11	0788	1104180	-651421	H	3	20946	L	83090615	000000	000000	152153	004000	551	V
FA096	HD96548	11	0779	1104180	-651421	H	3	20948	L	83090617	000000	000000	173544	004000	561	V
WRFPC	HD 96548	11	0780	1104180	-651421	H	3	20967	L	83090811	000000	000000	115800	003200		G E=224,C=220,B=53
SGFAU	HD 96919	25	0510	1106286	-614034	L	2	16530	L	83080515	000000	000000	150700	000007		G C=185,B=25
SGFAU	HD 96919	25	0510	1106286	-614034	L	3	20617	L	83080515	000000	000000	150300	000030		G C=200,B=25
SGFAU	HD 96919	25	0510	1106286	-614034	L	2	16723	L	83090308	000000	000000	082900	000007		G C=185,B=25
SGFAU	HD 96919	25	0510	1106286	-614034	L	2	16591	L	83081415	000000	000000	152800	000007		G C=220,B=22
SGFAU	HD 96919	25	0510	1106286	-614034	L	3	20692	L	83081415	000000	000000	152400	000030		G C=220,B=18
SGFAU	HD 96919	25	0510	1106286	-614034	L	3	20897	L	83090308	000000	000000	082500	000030		G C=205,B=20
SGFAU	HD 96919	25	0510	1106286	-614034	L	3	20826	L	83082815	000000	000000	152900	000030		G C=205,B=17
SGFAU	HD 96919	25	0510	1106286	-614034	L	3	20657	L	83081016	000000	000000	164400	000030		G C=210,B=18
SGFAU	HD 96919	25	0510	1106286	-614034	L	2	16657	L	83082412	000000	000000	122400	000007		G C=200,B=20
SGFAU	HD 96919	25	0510	1106286	-614034	L	3	20767	L	83082412	000000	000000	121900	000030		G C=200,B=18
SGFAU	HD 96919	25	0510	1106286	-614034	L	3	20714	L	83081817	000000	000000	170900	000030		G C=210,B=18
CCFDS	HD 97334	44	0640	1109493	+360517	H	1	02108	L	83102211	000000	000000	113400	006000		G C=230,B=73
CBFMP	HD 97528	66	0750	1110460	-261135	L	3	21444	L	83110404	000000	000000	044500	002500		G E=219,C=120,B=21
CBFMP	HD 97528	66	0750	1110460	-261135	L	1	02211	L	83110405	000000	000000	051500	001000		G C=1.5X,B=38
OBFGS	HD 98718	21	0389	1118431	-541300	H	3	20793	L	83082517	000000	000000	172300	000055		G C=215,B=37
AFFJL	HD 100563	41	0580	1131484	+032017	L	3	21554	L	83111609	000000	000000	094600	012000		G E=162,C=5X,B=90
AFFJL	HD 100563	41	0580	1131484	+032017	H	1	02278	L	83111609	000000	000000	091400	002200		G E=154,C=255,B=110
FM038	HD101008	12	0933	1134365	-630715	H	1	02006	L	83092517	000000	000000	171406	007500	603	V
FM038	HD101008	12	0929	1134365	-630715	H	3	21171	L	83092515	000000	000000	150724	010000	501	V
FM038	HD308813	23	0948	1135381	-630222	H	3	21172	L	83092519	000000	000000	191413	013600	502	V
FA050	HD101108	30	0908	1135402	390153	L	3	21396	LS	83102915	162440	002000	154731	003000	701	V 401$
FA050	HD101108	30	0908	1135402	390153	L	1	02171	LS	83102915	153940	000312	153158	000448	603	V 403$
FE086	NGC 3783	84	1353	1136299	-372759	L	3	21760	L	83121310	000000	000000	105119	010000	351	V
FE086	NGC3783	84	1338	1136300	-372800	L	3	21863	LS	83122411	124631	008000	110217	010000	351	V 341$
FE086	NGC3783	84	1328	1136300	-372800	L	3	21797	LS	83121811	123754	006000	110018	009000	352	V 232$
FE086	NGC3783	84	1350	1136300	-372800	L	1	02405	L	83121312	000000	000000	123816	009000	463	V
FE086	NGC3783	84	1339	1136300	-372800	L	1	02481	L	83122414	000000	000000	141349	006000	452	V
FE086	NGC3783	84	1342	1136300	-372800	L	3	21798	L	83121814	000000	000000	144802	011000	352	V
FE086	NGC3783	84	1347	1136300	-372800	L	1	02427	L	83121813	000000	000000	134247	006000	562	V
FE086	NGC3783	84	1339	1136300	-372800	L	1	02428	L	83121816	000000	000000	164334	006300	562	V
FE086	NGC3783	84	1329	1136300	-372800	L	3	21733	S	83120914	145914	016800	000000	000000	351	V
FE086	NGC3783	84	1331	1136300	-372800	L	3	21732	L	83120912	000000	000000	120639	009000	350	V
FE086	NGC3783	84	1331	1136300	-372800	L	1	02375	L	83120913	000000	000000	134110	007000	562	V
FE086	NGC3783	84	1332	1136300	-372800	L	1	02374	L	83120910	000000	000000	103945	008000	562	V
FI158	HD102567	59	0912	1145336	-615544	L	2	16626	L	83081921	000000	000000	210644	000310	702	V
FI158	HD102567	59	0914	1145336	-615544	L	3	20719	L	83081920	000000	000000	204736	000604	500	V
NPFST	NG 3918	70	1000	1147469	-565400	H	3	21765	L	83121406	000000	000000	064600	002000		G E=3X,C=210,B=145

PRD	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
NPFST	NG	3918	70	1000	1147469	-565400	H	1	02410	L	83121406	000000	000000	061100	003000		G E=3X,C=235,B=166
NPFST	NG	3918	70	1000	1147469	-565400	H	3	21764	L	83121404	000000	000000	040100	012000		G E=8X,C=185,B=115
NPFST	NG	3918	70	1000	1147469	-565417	H	1	02409	L	83121402	000000	000000	025500	006000		G E=3-5X,C=150,B=66
NPFST	NG	3918	70	1000	1147469	-565400	H	3	21767	L	83121408	000000	000000	083100	002000		G E=230,C=80,B=50
NPFST	NG	3918	70	1000	1147469	-565417	H	3	21763	L	83121401	000000	000000	014900	006000		G E=3-5X,C=125,B=66
NPFST	NG	3918	70	1000	1147469	-565417	H	1	02408	L	83121400	000000	000000	004400	006000		G E=3-4X,C=125,B=120
NPFST	NG	3918	70	1000	1147469	-565417	H	3	21762	L	83121322	000000	000000	220700	015000		G E=4-5X,C=100,B=80
NPFST	NG	3918	70	1000	1147469	-565417	H	1	02407	L	83121319	000000	000000	190100	018000		G E=3-4X,C=120,B=70
NPFST	NG	3918	70	1000	1147469	-565417	H	3	21768	L	83121409	000000	000000	091900	003000		G E=1.5X,C=65,B=32
NPFST	NG	3918	70	1000	1147469	-565400	H	3	21766	L	83121407	000000	000000	074200	001500		G E=233,C=140,B=90
NPFST	NG	3918	70	1000	1147469	-565400	H	1	02411	L	83121408	000000	000000	080300	001500		G E=174,C=146,B=99
FITOO	NOVA MUSC		55	1085	1149350	-665543	H	2	16554	L	83080900	000000	000000	005808	002100	031	V
FITOO	NOVA MUSC		55	1081	1149350	-665543	L	3	20645	LS	83080900	005215	000200	003459	001400	370	V
FITOO	NOVA MUSC		55	1085	1149350	-665543	H	3	20646	L	83080901	000000	000000	012633	002000	031	V
FA081	NOVA MUSC		55	1075	1149351	-665543	L	3	20590	LS	83080221	221751	000300	215716	001300	380	V 260$
FA081	NOVA MUSC		55	1081	1149351	-665543	L	2	16507	LS	83080221	212813	000300	211141	001300	562	V 332$
HEFES	PG1151-029		17	1620	1151413	-025523	L	3	21803	L	83121907	000000	000000	072400	008000		G C=200,B=40
BLFAG	OOSKY BKGD		07	9999	1156576	+293125	L	1	02354	L	83120519	000000	000000	190200	012000		G C=85,B=40
BLFAG	Q 1156+295		85	1600	1156581	+293124	L	3	21695	L	83120519	000000	000000	190000	017000		G C=70,B=45
SGFAU	HD 105056		13	0750	1203128	-691741	L	2	16621	L	83081816	000000	000000	160500	000013		G C=210,B=22
SGFAU	HD 105056		13	0750	1203128	-691741	L	2	16689	L	83082816	000000	000000	161100	000013		G C=200,B=25
SGFAU	HD 105056		13	0750	1203128	-691741	L	3	20656	L	83081015	000000	000000	152800	000018		G C=190,B=14
SGFAU	HD 105056		13	0750	1203128	-691741	L	3	20827	L	83082816	000000	000000	160700	000018		G C=200,B=18
SGFAU	HD 105056		13	0755	1203128	-691741	L	2	16566	L	83081015	000000	000000	155000	000013		G C=195,B=23
SGFAU	HD 105056		13	0750	1203128	-691741	L	3	20693	L	83081416	000000	000000	162600	000018		G C=190,B=17
SGFAU	HD 105056		13	0750	1203128	-691741	L	2	16592	L	83081416	000000	000000	165600	000013		G C=200,B=22
SGFAU	HD 105056		13	0750	1203128	-691741	L	3	20766	L	83082411	000000	000000	112400	000018		G C=185,B=17
SGFAU	HD 105056		13	0750	1203128	-691741	L	3	20618	L	83080516	000000	000000	160100	000018		G E=167,C=180,B=20
SGFAU	HD 105056		13	0750	1203128	-691741	L	3	20713	L	83081816	000000	000000	161000	000018		G C=190,B=17
SGFAU	HD 105056		13	0750	1203128	-691741	L	3	20896	L	83090307	000000	000000	074800	000018		G E=161,C=180,B=20
SGFAU	HD 105056		13	0750	1203128	-691741	L	2	16531	L	83080516	000000	000000	160500	000013		G C=180,B=25
IGFJS	HD 105627		13	0810	1207062	-621813	H	3	20623	L	83080607	000000	000000	072700	005000		G C=212,B=42
IGFJS	HD 105627		13	0810	1207062	-621813	H	2	16537	L	83080608	000000	000000	082300	004000		G C=235,B=42
EE270	NGC4151		84	1244	1208003	394101	L	1	02269	L	83111513	000000	000000	133849	003000	353	V
EE270	NGC4151		84	1243	1208003	394101	L	3	21547	L	83111512	000000	000000	124459	005000	351	V
EE270	NGC4151		84	1243	1208004	394102	L	3	21548	L	83111514	000000	000000	141423	006000	351	V
EE270	NGC4151		84	1239	1208004	394102	L	3	21470	L	83110712	000000	000000	124211	004500	350	V
EE270	NGC4151		84	1236	1208004	394102	L	1	02217	L	83110415	000000	000000	150221	003500	354	V
EE270	NGC4151		84	1238	1208004	394102	L	1	02270	L	83111515	000000	000000	151839	003500	353	V
EE270	NGC4151		84	1238	1208004	394102	L	1	02297	L	83111915	000000	000000	150938	004000	362	V
EE270	NGC4151		84	1242	1208004	394102	L	3	21578	L	83111913	000000	000000	130205	012000	361	V
EE270	NGC4151		84	1239	1208004	394102	L	1	02296	L	83111912	000000	000000	122736	003000	352	V
EE270	NGC4151		84	1236	1208004	394102	L	3	21449	L	83110412	000000	000000	123302	005000	351	V
EE270	NGC4151		84	1234	1208004	394102	L	1	02216	L	83110413	000000	000000	133221	003000	353	V
EE270	NGC4151		84	1232	1208004	394102	L	3	21450	L	83110414	000000	000000	140804	005000	351	V

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
EE270	NGC4151	84	1236	1208004	394102	L	3	21409	L	83103016	000000	000000	161543	004000	351	V
EE270	NGC4151	84	1242	1208004	394102	L	1	02242	L	83110715	000000	000000	152234	003500	351	V
EE270	NGC4151	84	1232	1208004	394102	L	1	02182	L	83103017	000000	000000	170006	003000	352	V
EE270	NGC4151	84	1240	1208004	394102	L	3	21471	L	83110714	000000	000000	141120	006500	360	V
EE270	NGC4151	84	1223	1208004	394102	L	3	21408	L	83103014	000000	000000	144356	005000	350	V
EE270	NGC4151	84	1240	1208004	394102	L	1	02241	L	83110713	000000	000000	133417	003000	351	V
EE270	NGC4151	84	1230	1208004	394102	L	1	02181	L	83103015	000000	000000	153901	003000	353	V
EE270	NGC4151	84	1238	1208040	394102	L	3	21515	L	83111113	000000	000000	130014	004500	351	V
EE270	NGC4151	84	1244	1208040	394102	L	1	02254	L	83111113	000000	000000	135802	005000	462	V
EE270	NGC4151	84	1240	1208040	394102	L	3	21516	L	83111114	000000	000000	144346	006600	362	V
FI041	W CRU	66	0849	1209200	-583018	H	3	20667	L	83081218	000000	000000	183850	042300	236	V
FC231	HD106111	53	0616	1210042	-695225	H	1	02141	L	83102517	000000	000000	174600	017000	704	V
FC231	HD106111	53	0635	1210042	-695225	H	1	02156	L	83102714	000000	000000	145113	024000	704	V
HSFCW	OO HZ 21	17	1470	1211250	+331307	L	1	02472	L	83122304	000000	000000	040800	009836		G C=3X,B=90
HSFCW	OO HZ 21	17	1420	1211250	+331307	L	3	21850	L	83122303	000000	000000	033500	002100		G C=170,B=25
HSFCW	OO HZ 21	17	1420	1211250	+331307	L	1	02471	L	83122303	000000	000000	030000	003200		G C=180,B=40
HSFCW	OO NULL	99	9999	1211250	+331307	L	3	21851	L	83122305	000000	000000	055500	000000		G NO COMMENTS
FA183	HZ 21	37	1475	1211251	331311	L	1	02465	L	83122212	000000	000000	122509	008000	703	V
FA183	HZ21	37	1475	1211251	331311	L	3	21847	L	83122217	000000	000000	171926	002900	500	V
FA183	HZ 21	37	1475	1211251	331311	L	3	21846	L	83122215	000000	000000	154625	003500	500	V
FA183	HZ 21	37	1475	1211251	331311	L	3	21845	L	83122213	000000	000000	134328	004500	600	V
FA183	HZ 21	37	1475	1211251	331311	L	3	21844	L	83122211	000000	000000	111919	006000	700	V
FA183	HZ 21	37	1475	1211251	331311	L	1	02467	L	83122216	000000	000000	162425	005000	503	V
FA183	HZ 21	37	1475	1211251	331311	L	1	02466	L	83122214	000000	000000	144433	005500	503	V
OBFGS	HD 106911	21	0426	1215222	-790205	H	3	20982	L	83090911	000000	000000	110500	000150		G C=240,B=40
IGFDY	OO SW DRA	33	1040	1215260	+694716	H	1	02017	L	83100223	000000	000000	235300	079200		G C=205,B=125
IGFDY	OOSKY BKGD	07	9999	1215260	+694716	L	3	21202	L	83100100	000000	000000	002400	070000		G B=138
IGFDY	OO SW DRA	33	1040	1215260	+694716	H	1	02008	L	83100100	000000	000000	002100	074000		G C=220,B=135
IGFDY	OOSKY BKGD	07	9999	1215260	+694716	L	3	21216	L	83100223	000000	000000	235700	075200		G B=110
FM140	SW DRA	53	1116	1215261	694717	E	9	01476	2	83093000	000000	000000	000000	016000		V FES FOR LWP 2008 AND SWP
FM140	SW DRA	53	1116	1215261	694717	L	1	02007	LS	83093015	154846	000800	152749	001600	401	V 301$
FM140	SW DRA	53	9999	1215261	694717	E	9	01478	2	83100215	000000	000000	154000	016000		V FIELD FOR LWP 2017
HCFSP	HD 107700	39	0170	1219596	+260724	L	3	21601	L	83112109	000000	000000	093100	000036		G C=165,B=15
HCFSP	HD 107700	39	0170	1219596	+260724	H	1	02306	L	83112109	000000	000000	093700	001800		G C=1.5X,B=120
FE073	NGC 4350	80	1256	1221264	165820	L	1	02423	L	83121710	000000	000000	104649	041000	306	V GDE(-753,-599) 97,SO
FE073	NULL	99	9999	1221264	165820	L	1	02422		83121700	000000	000000	000000	000000		V G1-CUTOFF
FI158	WRA977	59	1084	1223497	-622937	L	3	20720	L	83081921	000000	000000	214727	006000	101	V
OBFGS	HD 108483	20	0416	1225195	-495713	H	3	20784	L	83082511	000000	000000	115900	000500		G C=10X,B=185
OBFGS	HD 108483	20	0391	1225195	-495713	H	3	20792	L	83082516	000000	000000	165300	000033		G C=210,B=32
EGFJM	NG 4501	80	0000	1229276	+144142	L	3	21640	L	83112921	000000	000000	210000	018000		G B=40
MLFCW	HD 109387	25	0389	1231215	+700348	H	3	20802	L	83082610	000000	000000	101400	000125		G C=210,B=40
MLFCW	HD 109387	25	0389	1231215	+700348	H	3	20834	L	83082911	000000	000000	112600	000125		G C=220,B=41
MLFCW	HD 109387	25	0389	1231215	+700348	H	3	21049	L	83091408	000000	000000	082800	000125		G C=220,B=40
MLFCW	HD 109387	25	0389	1231215	+700348	H	3	20985	L	83090912	000000	000000	125800	000125		G C=215,B=39
MLFCW	HD 109387	25	0389	1231215	+700348	H	3	20877	L	83090112	000000	000000	122300	000125		G C=220,B=40

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT	
PHCAL	OO WAVCAL	98	0000	1231215	+700348	L	2	16711	S	83090112	123900	000001	000000	000000	G E=20X,B=85	TFL00
PHCAL	OO WAVCAL	98	0000	1231215	+700348	H	2	16712	S	83090113	130900	000016	000000	000000	G E=50X,B=130	TFL00
PHCAL	OO TFLOOD	99	0000	1231215	+700348	H	2	16713	L	83090113	000000	000000	133600	000007	G C=120,B=120	
MLFCW	HD 109387	25	0390	1231215	+700348	H	3	20772	L	83082416	000000	000000	163600	000110	G C=190,B=33	
MLFCW	HD 109387	25	0389	1231215	+700348	H	3	20955	L	83090707	000000	000000	073400	000125	G C=215,B=37	
FA255	HD109387	26	0389	1231216	700349	H	3	21037	L	83091318	000000	000000	181833	000125 501	V	
MLFCW	HD 109387	25	9999	1231216	+700349	H	3	21005	L	83091012	000000	000000	123400	000125	G	
FA060	IC3568	70	1136	1231466	825022	L	3	20870	S	83083123	235724	003000	000000	000000 550	V	
HSFES	OOFEIGE	65	1200	1233239	+423859	L	1	02149	L	83102704	000000	000000	041900	000530	G C=210,B=42	
HSFES	OOFEIGE	65	1200	1233239	+423859	L	3	21374	L	83102705	000000	000000	054400	000400	G C=196,B=25	
HSFES	OOFEIGE	65	1200	1233239	+423859	H	3	21373	L	83102623	000000	000000	230500	030000	G C=1.5X,B=157	
OBFGS	HD 109668	20	0269	1234107	-685137	H	3	20873	L	83090109	000000	000000	093400	000009	G C=205,B=35	
CCFAD	HD 110281	47	0934	1238297	-002045	L	3	20601	L	83080402	000000	000000	025700	040000	G C=70,B=70	
CCFAD	HD 110281	47	0930	1238298	-002046	L	2	16545	L	83080707	000000	000000	072200	013500	G E=116,C=85,B=40	
LDFBH	OO GL 488	48	0858	1248099	-002937	L	1	02404	L	83121309	000000	000000	093300	001200	G E=118,C=55,B=35	
OBFGS	HD 112078	21	0484	1251400	-585231	H	3	20790	L	83082515	000000	000000	154000	000150	G C=220,B=41	
IGFJS	HD 112784	13	0830	1257021	-601927	H	2	16538	L	83080610	000000	000000	103300	004000	G C=220,B=45	
IGFJS	HD 112784	13	0830	1257021	-601927	H	3	20624	L	83080609	000000	000000	091900	007000	G C=230,B=55	
FA083	H4-1	70	1540	1257028	275420	L	3	20599	L	83080318	000000	000000	185402	006000 261	V	
FA083	H4-1	70	1540	1257028	275420	L	2	16513	L	83080320	000000	000000	200728	006000 233	V	
FA144	HD113120	26	0605	1259394	-711226	H	2	16867	L	83092420	000000	000000	200822	000555 502	V	
FA144	HD113120	26	0608	1259394	-711226	H	3	21155	L	83092419	000000	000000	195934	000525 501	V	
AFFJL	HD 113337	41	0600	1259499	+635243	H	1	02276	L	83111604	000000	000000	045400	002500	G E=101,C=100,B=42	
AFFJL	HD 113337	41	6000	1259499	-635243	L	3	21553	L	83111608	000000	000000	080200	011000	G NO COMMENTS	
EGFJM	NG 5005	80	0000	1308372	+371924	L	1	02332	L	83113000	000000	000000	004300	016000	G C=115,B=72	
CCFFF	HD 116204	47	0720	1319172	+390831	L	3	21859	L	83122402	000000	000000	022000	006000	G E=100,C=60,B=30	
OBFGS	HD 116087	21	0462	1319229	-604337	H	3	20791	L	83082516	000000	000000	161800	000122	G C=190,B=35	
AFFJL	HD 116568	41	0580	1321569	-045412	H	2	16550	L	83080814	000000	000000	145200	003000	G E=90,C=225,B=40	
AFFJL	HD 116568	41	0580	1321569	-045412	L	3	20638	L	83080812	000000	000000	121100	015000	G E=137,C=20X,B=65	
DCFSP	OO W VIR	53	1010	1323269	-030708	L	2	16596	L	83081502	000000	000000	024100	012000	G C=165,B=35	
FKFJL	HD 117555	45	0820	1328247	+242924	H	2	16558	L	83080915	000000	000000	151400	015000	G C=190,B=72	
FKFJL	HD 117555	45	0820	1328247	+242924	H	2	16546	L	83080802	000000	000000	023200	009000	G E=100,C=85,B=38	
AFFJL	HD 118216	40	0500	1332338	+372616	H	2	16548	L	83080808	000000	000000	083000	001000	G C=160,B=30	
FETOO	NULL READ	99	9999	1334016	-293847	L	1	02534		83123100	000000	000000	000000	000000	V	
FETOO	NULL READ	99	9999	1334016	-293847		2	17195		83123100	000000	000000	000000	000000	V DEGAS LWR	
FETOO	SN EVANS	56	1243	1334016	-293847	L	3	20620	L	83080522	000000	000000	221608	021200 201	V	
FETOO	SN IN M83	56	1238	1334016	-293847	L	2	16534	L	83080518	000000	000000	183755	021500 308	V PREVIOUS IMAGE HAD 5X OVE	
FETOO	SN-M83	56	1290	1334016	-293847	L	2	16623	L	83081819	000000	000000	193956	036300 319	V	
FETOO	SN IN M-83	56	1424	1334016	-293847	L	2	17196	L	83123111	000000	000000	111454	034000 306	V	
FE182	NGC 5236	80	1139	1334119	-293639	H	2	16646	L	83082218	000000	000000	183800	042500 419	V	
FE164	MKN266	84	1438	1336146	483148	L	1	02291	L	83111814	000000	000000	140734	032700 304	V +25M WITH ZERO IN LWLA	
HSFCW	OO+70 5824	16	1290	1336588	+703219	L	1	02438	L	83122003	000000	000000	035300	001630	G C=210,B=42	
HSFCW	OO+70 5824	16	1290	1336588	+703219	L	3	21815	L	83122003	000000	000000	031700	001500	G C=200,B=18	
HSFCW	OO+70 5824	16	1290	1336588	+703219	L	3	21816	L	83122004	000000	000000	042500	001500	G C=200,B=20	
HSFCW	OO+70 5824	16	1290	1336588	+703219	L	1	02437	L	83122002	000000	000000	024300	001630	G C=210,B=40	

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
HSFCW	OO+70 5824	37	1290	1337355	+703218	L	3	21828	L	83122020	000000	000000	205300	002248	G	C=1.2X,B=23
HSFCW	OO+70 5824	37	1290	1337355	+703218	L	1	02448	L	83122018	000000	000000	184700	004124	G	C=4X,B=43
HSFCW	OO+70 5824	37	1290	1337355	+703218	L	1	02449	L	83122020	000000	000000	200600	004124	G	C=4X,B=42
HSFCW	OO+70 5824	37	1290	1337355	+703218	L	3	21827	L	83122019	000000	000000	193400	002248	G	C=1.2X,B=22
AFFJL	HD 119288	41	0620	1339445	+083829	H	2	16556	L	83080906	000000	000000	063100	004000	G	C=220,B=35
AFFJL	HD 119288	41	0620	1339445	+083829	L	3	20648	L	83080907	000000	000000	071700	018000	G	E=78,C=3-5X,B=48
GHFBS	OO VZ1128	16	1490	1339540	+283800	H	3	21683	L	83120418	000000	000000	182600	074400	G	C=230,B=143
GHFBS	OO VZ1128	16	1490	1339584	+284106	L	3	21682	L	83120409	000000	000000	090400	002000	G	C=105,B=20
GHFBS	OO VZ1128	16	1490	1339584	+284106	F	9	01502	L	83120409	000000	000000	093200	016000	G	NO COMMENTS
FM014	VZ1128	16	1490	1339585	284106	E	9	01503	2	83120411	000000	000000	111500	016000	V	TARGET IN SWLA
FM014	VZ1128	16	1490	1339585	284106	L	1	02351	L	83120410	000000	000000	101222	003000	303	V
FA141	HD119921	30	0524	1344009	-360009	L	2	16703	LS	83083019	195242	000020	194900	000005	402	V 602$
FA141	HD119921	30	0529	1344009	-360009	H	3	20854	L	83083019	000000	000000	193007	001500	500	V
FA141	HD119921	30	0524	1344009	-360009	L	3	20855	LS	83083020	201912	000030	201634	000010	401	V 501$
PHCAL	ETA UMA	21	0193	1345340	493344	H	1	02361	L	83120713	000000	000000	131857	000005	503	V
PHCAL	ETA UMA	21	0192	1345340	493344	H	3	21713	L	83120713	000000	000000	132242	000006	401	V
PHCAL	OOSAFEREAD	99	0180	1345343	+493344	H	1	02193	L	83110111	000000	000000	113100	000000	G	B=15
PHCAL	HD 120315	21	0180	1345343	+493344	H	1	02488	L	83122509	000000	000000	092900	000005	G	C=225,B=45
PHCAL	HD 120315	21	0180	1345343	+493344	H	1	02143	L	83102605	000000	000000	052900	000005	G	C=220,B=40
PHCAL	HD 120315	21	0180	1345343	+493344	H	2	17168	L	83112908	000000	000000	082400	000006	G	C=185,B=30
PHCAL	HD 120315	21	0180	1345343	+493344	H	3	21500	L	83111008	000000	000000	085000	000006	G	C=165,B=33
PHCAL	HD 120315	21	0180	1345343	+493344	H	2	16988	L	83110111	000000	000000	111100	000006	G	C=200,B=31
MLFCW	HD 120324	20	0330	1346357	-421332	H	3	20773	L	83082417	000000	000000	172800	000021	G	C=200,B=35
MLFCW	HD 120324	20	0330	1346357	-421332	H	3	20807	L	83082613	000000	000000	133600	000021	G	C=210,B=42
MLFCW	HD 120324	20	0330	1346357	-421332	H	3	20833	L	83082910	000000	000000	102700	000021	G	C=205,B=37
MLFCW	HD 120324	20	0330	1346357	-421332	H	3	20872	L	83090108	000000	000000	085800	000021	G	C=210,B=35
SPFHM	OO SATURN	03	0100	1348485	-083930	L	3	20631	L	83080710	000000	000000	103000	012000	G	C=10X,B=70
SPFHM	OO SATURN	03	0100	1348485	-083930	L	3	20632	L	83080713	000000	000000	134300	012000	G	C=10X,B=90
SPFHM	OO SATURN	03	0100	1348485	-083930	L	3	20633	L	83080716	000000	000000	163700	005500	G	C=5X,B=38
FE176	PG1351+64	85	1400	1351460	640028	L	3	21436	L	83110217	000000	000000	170733	016000	351	V
QSFWS	OOMARK 279	84	1440	1351536	+693313	L	3	21904	L	83122906	000000	000000	065800	007000	G	E=125,C=100,B=60
QSFWS	OOMARK 279	84	1440	1351536	+693313	L	1	02522	L	83122908	000000	000000	081500	009000	G	E=220,C=160,B=52
XGFGR	X 1352+183	85	1550	1352123	+181959	L	3	20706	L	83081702	000000	000000	025300	030000	G	E=189,C=100,B=60
AFFJL	HD 122106	41	0640	1357136	-031825	H	2	16555	L	83080902	000000	000000	022400	004000	G	C=162,B=35
AFFJL	HD 122106	41	0640	1357136	-031825	L	3	20647	L	83080903	000000	000000	031000	018000	G	E=71,C=5.5,B=39
WRFWK	OON5430 SW	88	0000	1359099	+593353	L	3	21577	L	83111909	000000	000000	095100	011500	G	C=170,B=130
WRFWK	OON5430 SW	88	0000	1359099	+593353	L	3	21576	L	83111907	000000	000000	071600	003500	G	C=2X,B=2X
WRFWK	OON5430 SW	88	0000	1359099	+593353	L	1	02294	L	83111906	000000	000000	063000	004000	G	C=220,B=175
WRFWK	OON5430 SW	88	0000	1359099	+593353	L	3	21575	L	83111904	000000	000000	045500	009000	G	C=125,B=98
WRFWK	OON5430 SW	88	0000	1359100	+593354	L	1	02282	L	83111709	000000	000000	094300	012000	G	C=210,B=160
WRFWK	OON5430 SW	88	0000	1359100	+593354	L	1	02280	L	83111705	000000	000000	050000	015000	G	C=180,B=110
WRFWK	OON5430 SW	88	0000	1359100	+593354	L	3	21567	L	83111709	000000	000000	090800	003000	G	C=125,B=95
WRFWK	OON5430 SW	88	0000	1359100	+593354	L	1	02281	L	83111708	000000	000000	082500	003600	G	C=232,B=192
WRFWK	OON5430 SW	88	0000	1359100	+593354	L	3	21566	L	83111707	000000	000000	073900	004000	G	C=160,B=130
QSFRR	OO Q 208	37	1500	1404456	+284129	L	3	21791	L	83121718	000000	000000	184100	025500	G	E=76,C=80,B=72

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
QSFRR	OO Q 208	37	1500	1404456	+284129	L	1	02424	L	83121723	000000	000000	230100	003800	G	B=65
HCFHB	HD 123585	44	0930	1406273	-440750	L	2	16721	L	83090305	000000	000000	055400	000500	G	C=123,B=23
HCFHB	HD 123585	44	0930	1406273	-440750	L	3	20910	L	83090322	000000	000000	221000	012000	G	C=130,B=35
DCFSP	HD 123984	53	0950	1408268	-130433	L	2	16597	L	83081505	000000	000000	053700	005000	G	C=1.3X,B=32
DCFSP	HD 123984	53	0950	1408268	-130433	D	9	01467	L	83081505	000000	000000	055900	016000	G	NO COMMENTS
LBFAS	HD 125162	36	0420	1414290	+461902	H	3	21320	L	83102111	000000	000000	113080	001800	G	C=4X,B=104
LBFAS	HD 125162	36	0420	1414290	+461902	H	3	21319	L	83102110	000000	000000	101800	000900	G	C=1.1X,B=98
LBFAS	HD 125162	36	0420	1414290	+461902	H	1	02099	L	83102110	000000	000000	103400	000400	G	C=1.1X,B=72
FE086	NGC5548	84	1358	1415432	252200	L	1	02406	L	83121316	000000	000000	162140	007000	463	V
FE086	NGC 5548	84	1360	1415432	252200	L	3	21761	L	83121314	000000	000000	145720	008000	350	V
FE086	NGC5548	84	1362	1415432	252200	L	3	21864	LS	83122415	173328	001400	155830	009000	351	V 121$
OBFGS	HD 125238	21	0410	1416114	-454941	H	3	20785	L	83082512	000000	000000	124100	000020	G	C=160,B=30
OBFGS	HD 125238	20	0355	1416114	-454941	H	3	20891	L	83090215	000000	000000	152500	000025	G	C=180,B=30
AFFJL	HD 125451	41	0540	1416510	+131403	L	3	20635	L	83080804	000000	000000	042600	012000	G	E=168,C=7X,B=25
AFFJL	HD 125451	41	0540	1416510	+131403	H	2	16547	L	83080806	000000	000000	063200	002500	G	C=230,B=35
EHFEJ	OOSKY BGGD	90	9999	1421175	+330555	L	1	02339	L	83113016	000000	000000	163800	017500	G	B=60
EHFEJ	Q 1421+330	85	1650	1421175	+330556	L	3	21646	L	83113013	000000	000000	132600	039000	G	B=70
AFFJL	HD 126660	41	0410	1423296	+520452	L	3	20636	L	83080807	000000	000000	072600	003000	G	E=76,C=6X,B=18
XGFGR	X 1426+015	84	1260	1426337	+013027	L	3	20707	L	83081715	000000	000000	154000	003500	G	C=110,B=68
XGFGR	X 1426+015	84	1260	1426337	+013027	L	2	16612	L	83081714	000000	000000	144600	005000	G	C=198,B=120
XGFGR	X 1426+015	84	1260	1426337	+013027	L	2	16611	L	83081713	000000	000000	131800	006000	G	C=220,B=130
XGFGR	X 1426+015	84	1260	1426337	+013027	L	3	20708	L	83081716	000000	000000	163900	006500	G	E=145,C=117,B=22
HCFHB	HD 127392	44	0970	1428553	-305846	L	2	16720	L	83090304	000000	000000	045600	001000	G	C=118,B=24
HCFHB	HD 127392	44	0970	1428553	-305846	L	3	20894	L	83090303	000000	000000	031500	009500	G	C=30,B=30
HSFTS	HD 127972	26	0260	1432193	-415622	H	3	20678	L	83081316	000000	000000	160100	000010	G	C=220,B=38
BEFTS	HD 127972	26	0260	1432193	-415622	H	3	20680	L	83081317	000000	000000	170700	000340	G	C=30X,B=3X
HSFTS	HD 127972	26	0260	1432193	-415622	H	3	20679	L	83081316	000000	000000	163500	000025	G	C=2.5X,B=67
FI095	HD128220B	16	0864	1432566	192558	H	3	20813	L	83082622	000000	000000	225411	003500	501	V
FI095	HD128220B	16	0865	1432566	192558	H	3	20814	L	83082623	000000	000000	235705	003500	501	V
OBFGS	HD 128345	21	0414	1434305	-491232	H	3	20786	L	83082513	000000	000000	132100	000110	G	C=240,B=53
SPFJC	OOAL CEN A	44	0000	1435550	-603718	L	3	20750	S	83082217	173400	000600	000000	000000	G	C=92,B=20
SPFJC	HD 128620	44	0000	1435550	-603718	L	3	20754	L	83082314	000000	000000	142500	003600	G	E=215,C=4X,B=100
GHFFB	OO FE 99	28	1000	1437120	+193900	H	1	02482	L	83122422	000000	000000	224800	012000	G	C=170,B=58
GHFFB	OO FE 99	28	1000	1437120	+193900	H	3	21865	L	83122418	000000	000000	183900	024000	G	C=180,B=65
CCFDS	HD 129333	44	0750	1437563	+643025	L	3	21323	L	83102123	000000	000000	230000	048000	G	E=181,C=1.2X,B=98
FA141	HD129685	30	0498	1441547	-345852	H	3	20856	L	83083021	000000	000000	210635	001000	400	V
AFFJL	HD 130945	41	0570	1447317	+461926	L	3	20639	L	83080815	000000	000000	155100	011700	G	E=53,C=20X,B=43
AFFJL	HD 130945	41	0570	1447317	+461926	H	1	02277	L	83111607	000000	000000	075200	002500	G	E=164,C=255,B=123
FM140	BT DRA	53	1205	1450299	601626	L	1	02016	L	83100214	000000	000000	142645	003000	301	V
GHFLH	HD 135485	27	0820	1512584	-143030	H	3	20598	L	83080316	000000	000000	163700	007200	G	C=225,B=50
FE176	AP-LIB	87	1510	1514452	-241122	L	2	16614	L	83081719	000000	000000	190039	040300	319	V
OBFGS	HD 136664	21	0469	1519571	-364050	H	3	20789	L	83082515	000000	000000	150100	000125	G	C=205,B=40
PHCAL	HD 137389	36	0590	1521410	+621328	L	1	02295	L	83111908	000000	000000	082200	000011	G	C=205,B=38
PHCAL	HD 137389	36	0590	1521410	+621328	L	3	21701	L	83120607	000000	000000	072500	000015	G	C=130,B=18
QSFAB	NG 5940	84	1430	1528515	+073738	L	2	16693	L	83082906	000000	000000	064300	018000	G	C=165,B=110

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
QSFAB	NG 5940	84	1430	1528515	+073738	L	3	20821	L	83082803	000000	000000	033000	018000		G E=95,C=80,B=52
QSFAB	NG 5940	84	1430	1528515	+073738	L	3	20832	L	83082903	000000	000000	030500	021000		G E=132,C=90,B=52
QSFAB	NG 5940	84	1430	1528515	+073738	L	2	16684	L	83082806	000000	000000	064000	018000		G C=255,B=160
FA152	HD138629	30	0513	1529595	410405	H	3	21579	L	83111916	000000	000000	163635	008000	601	V
GHFLH	00 ZET LIB	20	0550	1530054	-164105	H	2	16512	L	83080316	000000	000000	160600	000240		G C=225,B=33
GHFLH	00 ZET LIB	20	0550	1530054	-164105	H	3	20597	L	83080315	000000	000000	155900	000310		G C=210,B=35
FA152	HD138749	22	0428	1530547	313136	H	1	02412	L	83121411	000000	000000	115945	000120	701	V
FA152	HD138749	22	0425	1530547	313136	H	3	21770	L	83121411	000000	000000	114756	000145	501	V
FE152	HD138749	21	0423	1530547	313136	H	3	20640	L	83080818	000000	000000	183914	000145	500	V
OBFGS	HD 138690	20	0295	1531479	-410000	H	3	20788	L	83082514	000000	000000	143000	000011		G C=220,B=38
OBFGS	HD 138690	20	0278	1531479	-410000	H	3	20890	L	83090214	000000	000000	145300	000011		G C=200,B=38
QSFAB	OOMRK 290	84	1500	1534448	+580401	L	2	16842	L	83092203	000000	000000	031700	007500		G E=117,C=110,B=32
QSFAB	OOMRK 290	84	1500	1534448	+580401	L	3	21125	L	83092122	000000	000000	221300	000400		G E=243,C=132,B=65
QSFAB	OOMRK 290	84	1500	1534448	+580401	L	2	16850	L	83092222	000000	000000	221400	037500		G E=255,C=200,B=72
QSFRM	003C 323.1	85	1600	1545311	+210127	L	2	16677	L	83082706	000000	000000	060700	017000		G C=208,B=133
XQFRG	003C 323.1	85	1610	1545311	+210128	L	3	20764	L	83082402	000000	000000	024400	042800		G E=175,C=160,B=100
QSFRM	003C 323.1	85	1600	1545311	+210127	L	3	20816	L	83082702	000000	000000	024000	020000		G E=118,C=100,B=55
XQFRG	003C 323.1	85	1610	1545311	+761132	L	2	16665	L	83082502	000000	000000	023900	033600		G E=165,C=170,B=90
RCFAH	00 R CRB	52	0865	1546306	+281831	L	2	16709	SL	83090102	024900	000500	023300	001000		G C=180,B=23
RCFAH	00 R CRB	52	0974	1546306	+281831	L	2	16757	L	83090901	000000	000000	014900	016000		G C=4X,B=39
RCFAH	00 R CRB	52	0865	1546306	+281831	L	3	20871	L	83090101	000000	000000	014700	021000		G E=80,C=140,B=57
RCFAH	00 R CRB	52	0865	1546306	+281831	L	2	16708	L	83090101	000000	000000	011000	003000		G C=2-3X,B=25
RCFAH	00 R CRB	52	0926	1546306	+281831	L	2	16717	L	83090216	000000	000000	160100	002000		G C=200,B=25
RCFAH	00 R CRB	52	0926	1546306	+281831	L	3	20892	L	83090216	000000	000000	163300	004500		G C=60,B=30
RCFAH	00 R CRB	52	0865	1546306	+281831	L	2	16710	L	83090105	000000	000000	055400	013000		G C=13X,B=55
RCFAH	00 R CRB	52	0974	1546307	+281832	L	3	20976	L	83090822	000000	000000	224400	018000		G E=66,C=80,B=48
RCFAH	00 R CRB	52	9999	1546307	+281832	L	2	16756	L	83090822	000000	000000	220700	003000		G C=160,B=28
FM273	HD141637	20	0478	1547579	-253604	H	2	16525	S	83080423	235315	000210	000000	000000	502	V
FM273	HD141637	20	0477	1547579	-253604	H	3	20612	S	83080423	235755	000332	000000	000000	600	V
FM079	HD141637	20	0473	1547579	-253603	H	3	21009	L	83091016	000000	000000	165256	000240	501	V
HCFHB	HD 141804	44	0900	1549374	-540034	L	2	16727	L	83090403	000000	000000	032100	001000		G C=192,B=25
HCFHB	HD 141804	44	0900	1549374	-540034	L	3	20912	L	83090403	000000	000000	033900	007600		G C=78,B=25
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	1	02487	L	83122508	000000	000000	084400	000310		G C=215,B=35
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	2	16619	L	83081813	000000	000000	132200	000310		G C=175,B=28
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	1	02358	L	83120608	000000	000000	080400	000310		G C=230,B=38
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	3	20711	L	83081813	000000	000000	133000	000400		G C=180,B=20
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	2	17183	L	83121609	000000	000000	091000	000310		G C=160,B=26
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	3	21702	L	83120608	000000	000000	081300	000400		G C=180,B=18
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	1	01978	L	83081912	000000	000000	124600	000310		G C=220,B=43
PHCAL	BD+33 2642	20	1080	1550019	+330528	L	3	21871	L	83122508	000000	000000	085000	000400		G C=165,B=20
FM273	HD142096	21	0511	1550249	-200107	H	2	16521	S	83080419	193709	000259	000000	000000	402	V
FM273	HD142096	21	0518	1550249	-200107	H	3	20608	S	83080419	190411	000740	000000	000000	601	V
FM273	HD142114	21	0467	1550362	-251046	H	2	16524	S	83080422	222114	000217	000000	000000	502	V
FM273	HD142114	21	0468	1550362	-251046	H	3	20611	S	83080422	224818	000336	000000	000000	501	V
FM273	HD142165	21	0556	1550543	-242308	H	2	16523	S	83080421	211450	000832	000000	000000	502	V

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
FM273	HD142165	21	0553	1550543	-242308	H	3	20610	S	83080421	214207	001500	000000	000000 501 V
HEFDB	HD 142301	27	0590	1551391	-250549	L	3	21092	L	83091906	000000	000000	065100	000004 G C=105,B=18
HEFDB	HD 142301	27	0590	1551391	-250549	H	3	21093	L	83091908	000000	000000	080900	000900 G C=205,B=40
HEFDB	HD 142301	27	0590	1551391	-250549	L	2	16825	L	83091906	000000	000000	065600	000003 G C=148,B=25
FM273	HD142669	20	0393	1553475	-290410	H	2	16526	S	83080501	010200	000036	000000	000000 502 V
FM273	HD142669	20	0393	1553475	-290410	H	3	20613	S	83080501	010546	000102	000000	000000 601 V
FA144	HD142926	26	0587	1553495	424238	H	2	16864	L	83092414	000000	000000	143556	001200 603 V
FA144	HD142926	26	0586	1553495	424238	H	3	21151	L	83092415	000000	000000	150024	001100 500 V
SJFHM	OO JUPITER	03	-0190	1554291	-193556	L	3	20562	L	83080105	000000	000000	053400	001500 G E=63,C=3X,B=19
SJFHM	OO JUPITER	03	-0190	1554291	-193556	L	3	20561	L	83080104	000000	000000	043300	001500 G E=62,C=3X,B=19
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20571	L	83080112	000000	000000	124300	001500 G C=3X,B=35
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20572	L	83080113	000000	000000	133200	001500 G C=3X,B=41
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20574	L	83080115	000000	000000	151400	001500 G C=3X,B=65
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20566	L	83080108	000000	000000	084100	001500 G E=76,C=3X,B=20
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20576	L	83080116	000000	000000	164800	001500 G C=3X,B=40
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20573	L	83080114	000000	000000	142300	001500 G C=3X,B=50
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20569	L	83080111	000000	000000	111000	001500 G C=3X,B=30
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20570	L	83080111	000000	000000	115600	001500 G C=3X,B=32
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20577	L	83080117	000000	000000	173000	001500 G C=3X,B=27
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20563	L	83080106	000000	000000	062500	001000 G E=49,C=2X,B=19
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20564	L	83080107	000000	000000	070900	001500 G E=66,C=3X,B=19
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20567	L	83080109	000000	000000	092800	001500 G C=3X,B=21
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20575	L	83080116	000000	000000	160200	001500 G C=3X,B=62
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20568	L	83080110	000000	000000	101900	001500 G C=3X,B=26
SJFHM	OO JUPITER	03	-0190	1554309	-193556	L	3	20565	L	83080107	000000	000000	075500	001500 G E=73,C=3X,B=20
FM273	HD142883	21	0603	1554448	-205021	H	2	16522	S	83080420	201843	001308	000000	000000 502 V
FM273	HD142883	21	0601	1554448	-205021	H	3	20609	S	83080420	203521	002110	000000	000000 600 V
FM167	T CRB	63	1009	1557240	260339	L	2	16640	L	83082201	000000	000000	012327	002500 452 V
FI076	T CRB	63	1013	1557240	260339	L	3	20744	L	83082200	000000	000000	004436	003500 351 V
SJFJC	OO JUPITER	03	-0200	1557400	-195007	L	2	16637	SL	83082114	141100	001000	141200	001000 G C=20X,B=42
SJFJC	OO JUPITER	03	-0200	1557400	-195007	L	3	20739	L	83082114	000000	000000	143500	001500 G C=6X,B=40
SJFJC	OO JUPITER	03	-0200	1557400	-195007	L	3	20740	S	83082115	153000	004000	000000	000000 G C=240,B=42
SJFJC	OO JUPITER	03	-0200	1557400	-195007	L	2	16636	SL	83082113	132700	001000	132800	001000 G C=20X,B=45
SJFJC	OO JUPITER	03	-0200	1557400	-195007	L	3	20738	S	83082111	112700	006000	000000	000000 G C=105,B=60
SJFJC	OO JUPITER	03	-0200	1557400	-195007	L	2	16638	SL	83082117	172200	001000	172300	001000 G C=20X,B=24
SJFJC	OO JUPITER	03	-0200	1557400	-195007	L	3	20741	L	83082116	000000	000000	165800	001500 G C=3X,B=22
SJFJC	OO JUPITER	03	-0200	1557585	-195124	L	2	16641	L	83082211	000000	000000	111500	000006 G C=2X,B=24
SJFJC	OO JUPITER	03	-0200	1557585	-195124	L	3	20745	L	83082211	000000	000000	111700	000700 G C=1.5X,B=23
SJFJC	OO JUPITER	03	-0200	1557585	-195124	L	2	16642	L	83082212	000000	000000	122800	000015 G C=5X,B=25
SJFJC	OO JUPITER	03	-0200	1557585	-195124	L	3	20746	L	83082212	000000	000000	123200	003000 G C=10X,B=50
SJFJC	OO JUPITER	03	-0200	1557587	-195111	L	2	16643	L	83082213	000000	000000	133900	000030 G C=15X,B=30
SJFJC	OO JUPITER	03	-0200	1557587	-195111	L	3	20747	L	83082213	000000	000000	135100	000500 G C=228,B=22
SJFJC	OO JUPITER	03	-0200	1557587	-195111	L	2	16644	L	83082214	000000	000000	145700	000003 G C=1.2X,B=23
SJFJC	OO JUPITER	03	-0200	1557587	-195111	L	3	20748	L	83082215	000000	000000	152600	001500 G C=4X,B=23
SJFJC	OO JUPITER	03	-0200	1557587	-195111	L	3	20749	L	83082216	000000	000000	162500	001500 G C=3X,B=18

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT	
SJFJC	OO JUPITER	03	-0200	1557587	-195111	L	2	16645	L	83082216	000000	000000	162000	000006	G C=2X,B=23
SJFJC	OO JUPITER	03	-0200	1558160	-195216	L	3	20755	L	83082316	000000	000000	160900	003000	G E=1.1,C=6X,B=30
SJFJC	OO JUPITER	03	-0200	1558160	-195216	L	2	16650	L	83082316	000000	000000	164900	000100	G C=25X,B=23
SJFJC	OO JUPITER	03	-0200	1558160	-195216	L	3	20756	L	83082317	000000	000000	172300	000500	G E=59,C=230,B=19
SJFJC	OO JUPITER	03	-0200	1558168	-195216	L	2	16648	L	83082310	000000	000000	105400	000015	G C=5X,B=24
SJFJC	OO JUPITER	03	-0200	1558168	-195216	L	3	20753	L	83082312	000000	000000	125800	003000	G C=243,C=6X,B=70
SJFJC	OO JUPITER	03	-0200	1558168	-195216	L	2	16649	L	83082312	000000	000000	125500	000030	G C=10X,B=23
SJFJC	OO JUPITER	03	-0200	1558168	-195216	L	3	20751	L	83082311	000000	000000	111500	001500	G E=161,C=4X,B=22
SJFJC	OO JUPITER	03	-0200	1558168	-195216	L	3	20752	L	83082312	000000	000000	120300	001500	G E=168,C=170,B=27
FI166	AG DRA	57	0993	1601240	665630	L	3	21135	LS	83092219	193426	000500	191548	001500	360 V 240$
SJFHM	OO JUPITER	03	-0200	1601490	-200459	L	3	20887	L	83090212	000000	000000	120400	001500	G E=210,C=4X,B=90
SJFHM	OO JUPITER	03	-0200	1601490	-200459	L	3	20886	L	83090211	000000	000000	111300	001500	G E=195,C=3X,B=58
SJFHM	OO JUPITER	03	-0200	1601490	-200459	L	3	20884	L	83090209	000000	000000	092900	001500	G E=190,C=2-3X,B=42
SJFHM	OO JUPITER	03	-0200	1601490	-200459	L	3	20885	L	83090210	000000	000000	102000	001500	G E=182,C=3X,B=40
SJFHM	OO JUPITER	03	-0200	1601491	-200408	L	3	20888	L	83090213	000000	000000	130100	001200	G E=185,C=3-4X,B=100
HEFDB	HD 144334	27	0590	1603071	-232818	H	3	21084	L	83091810	000000	000000	103800	001000	G C=1.5X,B=90
HEFDB	HD 144334	27	0590	1603071	-232818	L	2	16819	L	83091809	000000	000000	090700	000004	G C=170,B=24
HEFDB	HD 144334	27	0590	1603071	-232818	L	2	16831	L	83092010	000000	000000	101000	000004	G C=165,B=24
HEFDB	HD 144334	27	0590	1603071	-232818	L	3	21083	L	83091809	000000	000000	090000	000006	G C=155,B=18
HEFDB	HD 144334	27	0590	1603071	-232818	H	3	21108	L	83092011	000000	000000	112900	001000	G B=115
HEFDB	HD 144334	27	0590	1603071	-232818	L	3	21107	L	83092010	000000	000000	101400	000006	G C=160,B=14
OBFGS	HD 144294	21	0423	1603180	-364004	H	3	20889	L	83090214	000000	000000	141800	000050	G C=190,B=40
OBFGS	HD 144294	21	0433	1603180	-364004	H	3	20787	L	83082513	000000	000000	135400	000050	G C=210,B=50
CDFJH	BS 5999	52	0740	1605127	-385822	L	3	20862	L	83083111	000000	000000	113000	001000	G C=200,B=40
CDFJH	BS 5999	52	0740	1605127	-385822	L	2	16706	L	83083110	000000	000000	105300	000300	G C=190,B=25
CDFJH	BS 5999	52	0740	1605127	-385822	L	3	20861	L	83083110	000000	000000	104300	000600	G C=135,B=25
CDFJH	HD 144668	52	0680	1605127	-385822	L	2	16970	L	83101206	000000	000000	064400	000335	G C=178,B=23
CDFJH	HD 144668	52	0680	1605127	-385822	L	3	21276	L	83101206	000000	000000	065300	001106	G C=177,B=18
PHCAL	OO WAVCAL	98	0000	1605127	-385822	H	1	01986	S	83083116	162400	000016	000000	000000	G E=50X,B=110 TFLOO
PHCAL	OO TFLOOD	99	0000	1605127	-385822	H	1	01987	L	83083117	000000	000000	171400	000025	G B=105
CDFJH	BS 5999	52	0740	1605127	-385822	L	2	16707	L	83083112	000000	000000	123500	001200	G C=3-4X,B=38
CDFJH	BS 5999	52	0740	1605127	-385822	L	3	20863	L	83083113	000000	000000	130200	004000	G C=1X,B=133
PHCAL	OO WAVCAL	98	0000	1605127	-385822	L	3	20864	S	83083114	144300	000002	000000	000000	G C=50X,B=105 TFLOO
PHCAL	OO WAVCAL	98	0000	1605127	-385822	H	3	20865	S	83083115	150900	000200	000000	000000	G E=50X,B=130 TFLOO
PHCAL	OO TFLOOD	99	0000	1605127	-385822	H	3	20866	L	83083115	000000	000000	153900	000005	G B=113
PHCAL	OO WAVCAL	98	0000	1605127	-385822	L	1	01985	S	83083115	155300	000001	000000	000000	G E=20X,B=95 TFLOO
EC267	HR5999	34	0731	1605128	-385823	L	2	16768	LS	83091116	163034	000300	163639	000800	702 V 442$
EC267	HR 5999	34	0729	1605128	-385823	H	2	16769	L	83091117	000000	000000	173224	011000	444 V
EC267	HR5999	34	0732	1605128	-385823	L	3	21020	LS	83091116	165152	000500	170043	002600	730 V 300$
SPFRN	OOCALLISTO	04	0580	1608249	-202511	L	2	16798	L	83091522	000000	000000	223600	000940	G C=190,B=25
FA060	IC4593	70	1068	1609233	121208	H	3	20867	L	83083118	000000	000000	182558	009000	331 V
SPFRN	OO IO	04	0550	1610210	-203014	L	2	16806	L	83091612	000000	000000	123300	003800	G C=210,B=45
SPFRN	OO EUROPA	04	0580	1610210	-203014	L	2	16803	L	83091609	000000	000000	095500	000730	G C=1.5X,B=28
SPFJC	OO URANUS	03	0550	1610411	-205911	L	3	20737	SL	83082102	024600	037500	024500	037500	G C=2X,B=75
SPFRN	OOGANYMEDE	04	0510	1610450	-203133	L	2	16800	L	83091606	000000	000000	065300	000400	G C=205,B=30

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT	
SPFRN	OOGANYMEDE	04	0510	1610450	-203133	L	2	16804	L	83091610	000000	000000	104500	000340	G C=255,B=28	
SPFRN	OO EUROPA	04	0580	1610450	-203133	L	2	16805	L	83091611	000000	000000	113500	000610	G C=255,B=25	
SPFRN	OOCALLISTO	04	0630	1610450	-203133	L	2	16802	L	83091608	000000	000000	084900	000940	G C=185,B=30	
SPFRN	OO EUROPA	04	0580	1610450	-203133	L	2	16801	L	83091607	000000	000000	075200	000800	G C=255,B=25	
SPFHM	OO URANUS	03	0600	1611134	-210045	L	3	20882	L	83090204	000000	000000	043400	012000	G E=180,C=160,B=55	
SPFHM	OO URANUS	03	0600	1611134	-210045	L	3	20881	L	83090201	000000	000000	014600	012000	G E=179,C=160,B=40	
SPFHM	OO URANUS	03	0600	1611134	-210045	L	3	20880	L	83090122	000000	000000	225500	012000	G E=182,C=160,B=40	
SPFHM	OO URANUS	03	0600	1611134	-210045	L	3	20883	L	83090207	000000	000000	071500	007500	G E=188,C=160,B=87	
RSFJL	HD146361/2	41	0536	1612482	+335901	L	2	16885	L	83092806	000000	000000	062800	002500	G E=222,C=182,B=55	
RSFJL	HD146361/2	41	0536	1612482	+335901	H	2	16896	L	83092911	000000	000000	110900	001230	G E=176,C=175,B=75	
RSFJL	HD146361/2	41	0536	1612482	+335901	L	3	21191	L	83092909	000000	000000	095700	002000	G E=146,C=230,B=107	
RSFJL	HD146361/2	41	0536	1612482	+335901	L	3	21182	L	83092805	000000	000000	054300	004000	G E=212,C=3X,B=70	
XGFGR	X 1613+658	84	1610	1613360	+655037	L	2	16673	L	83082607	000000	000000	071300	014500	G C=210,B=115	
XGFGR	X 1613+658	84	1610	1613360	+655037	L	3	20801	L	83082602	000000	000000	024000	027000	G E=220,C=155,B=90	
XGFGR	OOAGK65756	84	9999	1613521	+654907	D	9	01468	L	83082602	000000	000000	022500	016000	G NO COMMENTS	
PHCAL	OO NULL	99	0000	1622052	+411148	L	2	16561	L	83081003	000000	000000	032200	000000	G B=20	
PHCAL	OOSKY BKGD	07	0000	1622052	+411148	L	2	16562	L	83081003	000000	000000	034600	030000	G B=85	
PHCAL	OO NULL	99	0000	1622052	+411148	L	3	20660	L	83081102	000000	000000	025800	000000	G B=14	
QSFGF	OOIII ZW77	86	1520	1622053	+411148	L	3	20652	L	83081002	000000	000000	022100	045000	G E=174,C=150,B=72	
QSFGF	OOIII ZW77	86	1520	1622053	+411148	L	2	16570	L	83081102	000000	000000	025200	042000	G C=155,B=80	
PHCAL	OOSKY BKGD	07	0000	1622053	+411148	H	3	20661	L	83081103	000000	000000	034600	030000	G B=60	
SGFAU	HD 148379	23	0540	1626044	-460804	L	3	20765	L	83082410	000000	000000	104700	000115	G C=195,B=17	
SGFAU	HD 148379	23	0540	1626044	-460804	L	3	20712	L	83081814	000000	000000	144900	000115	G C=202,B=18	
SGFAU	HD 148379	23	0540	1626044	-460804	L	2	16620	L	83081814	000000	000000	144500	000011	G C=205,B=21	
SGFAU	HD 148379	23	0540	1626044	-460804	L	2	16656	L	83082410	000000	000000	105200	000011	G C=180,B=21	
SGFAU	HD 148379	23	0540	1626044	-460804	L	3	20895	L	83090306	000000	000000	064900	000115	G C=200,B=22	
SGFAU	HD 148379	23	0540	1626044	-460804	L	2	16722	L	83090306	000000	000000	065400	000011	G C=187,B=21	
SGFAU	HD 148379	23	0540	1626044	-460804	L	3	20619	L	83080516	000000	000000	165800	000115	G C=200,B=20	
SGFAU	HD 148379	23	0540	1626044	-460804	L	2	16532	L	83080517	000000	000000	170300	000011	G C=200,B=25	
SGFAU	HD 148379	23	0540	1626044	-460804	L	2	16593	L	83081417	000000	000000	173400	000011	G C=200,B=22	
SGFAU	HD 148379	23	0540	1626044	-460804	L	3	20694	L	83081417	000000	000000	172900	000115	G C=205,B=18	
SGFAU	HD 148379	23	0540	1626044	-460804	L	2	16533	L	83080517	000000	000000	173300	000041	G C=200,B=25	
SGFAU	HD 148379	23	0540	1626044	-460804	L	3	20828	L	83082817	000000	000000	172700	000436	G C=235,B=20	
SGFAU	HD 148379	23	0540	1626044	-460804	L	2	16690	L	83082817	000000	000000	170800	000011	G C=220,B=21	
SGFAU	HD 148379	23	0540	1626044	-460804	L	2	16565	L	83081014	000000	000000	144000	000011	G C=230,B=22	
SGFAU	HD 148379	23	0540	1626044	-460804	L	3	20655	L	83081014	000000	000000	143400	000115	G C=220,B=18	
PHCAL	OO TFLOOD	99	0000	1630312	-435628	H	2	16792	L	83091413	000000	000000	130500	000007	G B=140	
PHCAL	OO WAVCAL	98	0000	1630312	-435628	H	2	16791	S	83091412	123700	000016	000000	000000	G E=50X,B=145	TFLOO
PHCAL	OO WAVCAL	98	0000	1630312	-435628	L	2	16790	S	83091412	121200	000001	000000	000000	G E=10X,B=95	TFLOO
PHCAL	OO TFLOOD	99	0000	1630312	-435628	H	3	21054	L	83091411	000000	000000	114300	000005	G B=110	
PHCAL	OO WAVCAL	98	0000	1630312	-435628	L	3	21052	S	83091410	104100	000002	000000	000000	G E=10X,B=105	TFLOO
PHCAL	OO TFLOOD	99	0000	1630312	-435628	H	3	21053	S	83091411	110900	000005	000000	000000	G E=50X,B=140	
MLFCW	HD 149038	13	0490	1630313	-435629	H	3	21051	L	83091410	000000	000000	100200	000400	G C=1.5X,B=45	
IGFJS	HD 149038	23	0490	1630313	-435629	H	3	20628	L	83080617	000000	000000	170600	000245	G C=195,B=30	
IGFJS	HD 149038	23	0490	1630313	-435629	H	3	20629	L	83080617	000000	000000	173800	000300	G C=205,B=35	

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
IGFJS	HD 149038	23	0490	1630313	-435629	H	2	16542	L	83080617	000000	000000	171100	000200		G C=220,B=30
MLFCW	HD 149038	13	0490	1630313	-435629	H	3	20957	L	83090709	000000	000000	094100	000400		G C=250,B=40
MLFCW	HD 149038	13	0490	1630313	-435629	H	3	20983	L	83090911	000000	000000	114000	000400		G C=255,B=41
FA255	HD149038	13	0501	1630313	-435629	H	3	21067	L	83091516	000000	000000	165614	000240	501	V
MLFCW	HD 149038	13	0490	1630313	-435629	H	3	21003	L	83091011	000000	000000	111100	000400		G C=255,B=42
BEFTS	HD 149438	20	0280	1632459	-280651	H	3	21163	L	83092508	000000	000000	085000	000009		G C=240,B=41
PHCAL	HD 149438	20	0280	1632459	-280651	H	1	01979	S	83081913	133200	000011	000000	000000		G C=230,B=42
PHCAL	HD 149438	20	0280	1632459	-280651	H	2	16618	S	83081812	121000	000011	000000	000000		G C=210,B=33
PHCAL	HD 149438	20	0280	1632459	-280651	H	3	20710	S	83081812	121500	000009	000000	000000		G C=200,B=35
BEFTS	HD 149757	14	0260	1634240	-102803	H	3	21166	L	83092510	000000	000000	105900	000025		G C=235,B=40
QSFRG	PG1634+706	85	1490	1634516	+703736	L	2	16647	L	83082309	000000	000000	091600	003300		G E=157,C=90,B=35
QSFRG	PG1634+706	85	1490	1634516	+703736	H	1	01983	L	83082202	000000	000000	025100	041300		G C=140,B=83
QSFRG	PG1634+706	85	1490	1634517	+703737	H	1	01975	L	83081902	000000	000000	025600	041000		G C=170,B=138
QSFRG	PG1634+706	85	1490	1634517	+703737	H	1	01984	L	83082302	000000	000000	024700	036000		G C=105,B=83
QSFRG	PG1634+706	85	1490	1634517	+703737	H	1	01982	L	83082002	000000	000000	023500	043000		G B=80
FE156	NGC6205	83	9999	1639540	363300	E	9	01461	2	83081000	000000	000000	002455	016000		V FOR LWR16560
FE156	NGC6205	83	1084	1639540	363300	L	2	16560	L	83081000	000000	000000	002455	007800	303	V CENTER DIFFICULT ,FO
BLFAG	Q 1641+399	85	1600	1641176	+395411	L	3	21258	L	83100822	000000	000000	225000	017000		G E=89,C=63,B=32
HCFHB	HD 150862	41	0920	1641410	-250725	L	3	20911	L	83090400	000000	000000	005700	010500		G C=78,B=32
HCFHB	HD 150862	41	0920	1641410	-250725	L	2	16726	L	83090400	000000	000000	004300	000730		G C=135,B=25
FE157	MKN501	87	1400	1652117	395025	L	3	21211	L	83100118	000000	000000	182522	020200	312	V
IGFJS	HD 152559	13	0850	1652262	-404200	H	2	16539	L	83080613	000000	000000	131800	003500		G C=180,B=50
IGFJS	HD 152559	13	0850	1652262	-404200	H	3	20626	L	83080614	000000	000000	140600	005000		G C=175,B=65
IGFJS	HD 152559	13	0850	1652262	-404200	H	2	16540	L	83080614	000000	000000	145900	004000		G C=200,B=55
IGFJS	HD 152559	13	0850	1652262	-404200	H	3	20625	L	83080612	000000	000000	123700	003500		G C=120,B=40
XBFJR	OO HZ HER	59	1200	1656015	+352504	H	3	21314	L	83102021	000000	000000	213500	024000		G E=69,C=80,B=53
XBFJR	OO HZ HER	59	1200	1656015	+352504	H	3	21315	L	83102102	000000	000000	021300	021500		G C=1.5X,B=160
XBFJR	OO HZ HER	59	1200	1656015	+352504	H	3	21428	L	83110122	000000	000000	224600	030000		G E=95,C=115,B=67
XBFJR	OO HZ HER	59	1200	1656015	+352504	H	3	21427	L	83110118	000000	000000	180800	024000		G E=71,C=110,B=60
EI029	HZ HER	59	1341	1656016	352505	H	3	21324	L	83102214	000000	000000	141451	030000	332	V
FI090	HZ HER	59	9999	1656016	352505	E	9	01493	2	83102000	000000	000000	000000	016000		V FES FOR SWP21314
FI090	HZ HER	59	1355	1656016	352505	H	3	21426	L	83110112	000000	000000	124651	030000	303	V
FI090	HZ HER	59	1348	1656016	352505	H	3	21313	L	83102017	000000	000000	171358	024000	222	V
FI095	HZ-HER	59	1402	1656017	352505	L	3	20815	L	83082701	000000	000000	011635	003000	330	V
FI090	HZ HER	59	9999	1656026	352505	E	9	01494	2	83110119	000000	000000	191553	004000		V FIELD FOR SWP21427 5 KBPS
FA155	NGC6266	83	0650	1658059	-300259	L	3	20634	L	83080719	000000	000000	190453	040200	303	V
FE156	NGC6266	83	1000	1658060	-300300	L	2	16559	L	83080918	000000	000000	183558	030000	508	V
FA081	IC4634	70	1156	1658340	-214512	L	3	20578	L	83080118	000000	000000	184443	003500	341	V
FA081	IC4634	70	1157	1658340	-214512	L	2	16497	L	83080118	000000	000000	182207	001500	313	V
OD07K	OO M 2-9	70	1300	1702525	-100431	L	2	16571	L	83081113	000000	000000	132300	002500		G E=97,B=29
OD07K	OO M 2-9	70	1300	1702525	-100431	L	3	20662	L	83081110	000000	000000	104400	015000		G E=102,C=95,B=67
FM185	1704 + 608	85	1503	1704034	604831	D	9	01499	2	83120116	000000	000000	163500	000000		V REF. IMAGE SWP21654
FM185	1704+608	85	1530	1704034	604831	L	3	21653	L	83120110	000000	000000	103407	024000	342	V
EHFEJ	OOSKY BKGD	07	9999	1704035	+604831	L	1	02346	L	83120123	000000	000000	235400	076000		G B=160
EHFEJ	Q 1704+608	85	1530	1704035	+604831	L	3	21654	L	83120115	000000	000000	151700	033000		G E=165,C=130,B=70

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT	
EHFEJ	Q 1704+608	85	1530	1704035	+604831	L	3	21655	L	83120121	000000	000000	211200	026000	G E=113,C=150,B=94
CVFJP	00V20510PH	54	1560	1705138	-254438	L	3	21091	L	83091822	000000	000000	222800	035000	G E=2X,C=125,B=75
EHFEJ	HD 155763	25	0320	1708382	+654634	L	3	21658	L	83120207	000000	000000	071300	000008	G C=3X,B=34
EHFEJ	HD 155763	25	0320	1708382	+654634	L	3	21661	L	83120209	000000	000000	090000	000002	G C=165,B=24
EHFEJ	HD 155763	25	0320	1708382	+654634	L	3	21660	L	83120208	000000	000000	082300	000001	G C=105,B=21
EHFEJ	HD 155763	25	0320	1708382	+654634	L	3	21659	L	83120207	000000	000000	074800	000004	G C=1.5X,B=34
LGFJL	HD 156015	45	0540	1712222	+142644	D	9	01472	L	83092711	000000	000000	111500	016000	G NO COMMENTS
LGFJL	HD 156015	45	0540	1712222	+142644	H	2	16880	L	83092707	000000	000000	070600	006000	G E=4-5X,C=220,B=60
LGFJL	HD 156015	45	0540	1712222	+142644	H	2	16882	L	83092711	000000	000000	113800	000600	G E=117,C=120,B=50
LGFJL	00 WAVECAL	98	9999	1712222	+142644	H	3	21181	S	83092804	045600	000018	000000	000000	G E=6X,B=110 TFL00
LGFJL	00 WAVCAL	98	0540	1712222	+142644	H	3	21179	S	83092713	131000	000002	000000	000000	G E=2X,B=110 TFL00
LGFJL	HD 156015	45	0540	1712222	+142644	H	2	16883	L	83092712	000000	000000	123700	001100	G E=173,C=125,B=55
LGFJL	HD 156015	45	0540	1712222	+142644	H	3	21180	L	83092722	000000	000000	223700	079000	G C=6X,B=164
PHCAL	BACKGROUND	07	9999	1712223	142645	H	2	16884	L	83092715	000000	000000	155015	034000	V MEGD EXPOSURE
FA141	HD155896	22	0688	1712442	-421703	H	3	20858	L	83083023	000000	000000	231149	003000 501	V
GHFLH	00 68 HER	20	0470	1715286	+330910	H	2	16511	L	83080314	000000	000000	145200	000120	G C=180,B=33
BEFPB	HD 156633	26	0480	1715286	+330910	H	3	20853	L	83083017	000000	000000	174200	000212	G C=1.5X,B=43
GHFLH	00 68 HER	20	0470	1715286	+330910	H	3	20596	L	83080314	000000	000000	144700	000140	G C=170,B=33
HCFEB	00V636 SCO	53	0760	1719054	-453401	F	9	01483	L	83101522	000000	000000	222000	016000	G NO COMMENTS
HCFEB	00V636 SCO	53	0760	1719054	-453401	H	2	16983	L	83101522	000000	000000	223900	024000	G C=150,B=60
QSFRM	004C 34.47	85	1600	1721320	+342042	L	3	20817	L	83082716	000000	000000	161400	009600	G E=188,C=115,B=78
QSFRM	004C 34.47	85	1600	1721320	+342042	L	2	16678	L	83082709	000000	000000	094200	006000	G C=195,B=113
AFFJL	HD 157950	41	0450	1723586	-050239	L	3	20650	L	83080913	000000	000000	134400	006000	G E=118,C=5X,B=42
FC109	HD157999	47	0461	1724020	041130	L	3	21071	L	83091616	000000	000000	161721	030000 342	V
FC109	HD157999	47	0464	1724020	041130	L	3	21056	L	83091419	000000	000000	190541	013200 331	V
MPFHB	00ABELL 41	70	1570	1726103	-151045	L	2	16938	L	83100702	000000	000000	024300	020000	G C=115,B=50
IGFJS	HD 158926	20	0160	1730126	-370410	H	2	16541	L	83080616	000000	000000	161200	000004	G C=30%X,B=33
IGFJS	HD 158926	20	0160	1730126	-370410	H	3	20627	L	83080616	000000	000000	160900	000004	G C=240,B=B=37
FE156	ROB162	16	1300	1736342	-533656	H	3	20630	L	83080619	000000	000000	190108	040600 303	V
AFFJL	HD 160910	40	0560	1739439	+155826	H	2	16549	L	83080811	000000	000000	111400	002500	G E=84,C=210,B=35
AFFJL	HD 160910	40	0560	1739439	+155826	L	3	20637	L	83080809	000000	000000	090800	012000	G E=173,C=6-7X,B=50
FA060	HD316248	70	1190	1742450	-301102	L	3	21124	LS	83092120	203422	004500	200037	003000 211	V 211$SMAP FOCUS -2.42,THDA
FA081	MI-26	70	1190	1742451	-301053	L	2	16498	L	83080119	000000	000000	194649	020000 615	V
FA081	MI-26	70	1187	1742451	-301053	L	3	20579	L	83080123	000000	000000	231001	015700 311	V
FM167	HDE316285	26	0899	1745048	-275955	L	2	16639	L	83082123	000000	000000	233755	001000 311	V
FM167	HDE 316285	26	0898	1745048	-275955	L	3	20743	LS	83082122	231928	001500	224557	003000 112	V 112$
FI166	HDE316285	26	0895	1745048	-275955	L	2	16849	L	83092220	000000	000000	201634	006200 503	V
CCFDS	BD+18 3497	46	0920	1753337	+183027	L	1	02109	SL	83102213	132800	000340	132000	000150	G C=42,B=30
MLFJL	HD 164058	47	0240	1755240	+512936	H	2	16572	L	83081114	000000	000000	143400	008000	G E=10X,C=180,B=60
FA255	HD164284	26	0479	1757471	042212	H	3	21066	L	83091516	000000	000000	160550	000210 500	V
MLFCW	HD 164284	20	0480	1757471	+042212	H	3	20984	L	83090912	000000	000000	122200	000200	G C=220,B=40
MLFCW	HD 164284	20	0480	1757471	+042212	H	3	20956	L	83090708	000000	000000	085400	000200	G C=220,B=39
MLFCW	HD 164284	20	0480	1757471	+042212	H	3	21050	L	83091409	000000	000000	091400	000200	G C=220,B=40
MLFCW	HD 164284	20	0480	1757471	+042212	H	3	21004	L	83091011	000000	000000	114800	000200	G C=240,B=40
BEFTS	HD 164284	26	0480	1757480	+042130	H	3	21167	L	83092511	000000	000000	113700	000210	G C=235,B=40

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
BEFTS	HD 164284	26	0480	1757480	+042130	H	3	21168	L	83092512	000000	000000	120700	000320		G C=3X,B=55
BEFTS	HD 164284	26	0480	1757480	+042130	H	3	20670	L	83081310	000000	000000	105000	000320		G C=1.5X,B=50
BEFTS	HD 164284	26	0480	1757480	+042130	H	3	20669	L	83081310	000000	000000	102100	000210		G C=220,B=38
HSFES	OO 1758+36	28	1130	1758359	+362859	L	2	16578	L	83081302	000000	000000	024200	000300		G C=190,B=25
HSFES	OO 1758+36	28	1130	1758359	+362859	H	3	20668	L	83081302	000000	000000	025300	022500		G C=220,B=60
HSFES	OO 1758+36	28	1130	1758359	+362859	H	2	16579	L	83081306	000000	000000	064600	018000		G C=190,B=55
DCFSP	OO BL HER	53	1020	1758590	+191506	L	2	16598	L	83081507	000000	000000	072300	014500		G C=1.5X,B=72
FI146	96 HER	21	0539	1800150	204955	H	2	16661	L	83082421	000000	000000	214735	000230	512	V
FI146	96 HER	21	0536	1800150	204955	H	2	16653	L	83082321	000000	000000	215932	000230	511	V
FI146	96 HER	21	0532	1800150	204955	H	2	16669	L	83082521	000000	000000	214626	000230	512	V
FI146	96 HER	21	0527	1800150	204955	H	3	20760	L	83082322	000000	000000	222732	000320	511	V
HCFEB	OO W SGR	53	0550	1801495	-293503	H	2	16984	L	83101603	000000	000000	032300	015000		G CC=3X,B=83
CCFAD	HD 165195	47	0770	1802108	+034633	L	2	16543	L	83080702	000000	000000	024000	005000		G C=160,B=25
BEFPB	HD 166014	26	0380	1805354	+284516	H	3	20852	L	83083016	000000	000000	165400	008212		G C=127,B=27
FI041	W SER	66	0931	1806580	-153337	L	3	20665	L	83081201	000000	000000	012110	002700	341	V
IBFSP	HD 166612	39	0090	1809279	-281459	L	2	16854	L	83092311	000000	000000	114200	001400		G E=217,C=210,B=130
IBFSP	HD 166612	39	0090	1809279	-281459	L	3	21140	L	83092312	000000	000000	120900	000050		G C=200,B=20
IBFSP	HD 166612	39	0740	1809279	-281459	H	2	16808	L	83091622	000000	000000	220200	002600		G C=160,B=32
IBFSP	HD 166612	39	0740	1809279	-281459	L	3	21072	L	83091621	000000	000000	215600	000050		G C=155,B=20
FI196	AM HER	59	1460	1814586	495058	L	1	02208	L	83110316	000000	000000	161238	002400	231	V
FI196	AM HER	59	1460	1814586	495058	L	1	02206	L	83110313	000000	000000	133953	003000	222	V
FI196	AM HER	59	1460	1814586	495058	L	1	02207	L	83110315	000000	000000	151148	002400	231	V
FI196	AM HER	59	1460	1814586	495058	L	3	21441	L	83110319	000000	000000	190751	003900	201	V
FI196	AM HER	59	1460	1814586	495058	L	1	02209	L	83110318	000000	000000	182555	003400	201	V
FI196	AM HER	59	1460	1814586	495058	L	3	21440	L	83110316	000000	000000	164031	010000	331	V
FI196	AM HER	59	1460	1814586	495058	L	3	21439	L	83110315	000000	000000	153920	003000	220	V
FI196	AM HER	59	1460	1814586	495058	L	3	21438	L	83110314	000000	000000	141343	003000	220	V DOUBLE EXPOSURE 10M+20M
FI196	AM HER	59	1460	1814586	495058	L	3	21437	L	83110312	000000	000000	125758	003200	221	V DOUBLE EXP. 12MIN+20MIN
OD05K	OO AM HER	63	1300	1814587	+495055	L	2	16795	L	83091507	000000	000000	075000	003500		G E=179,C=115,B=32
OD05K	OO AM HER	63	1300	1814587	+495055	L	3	21059	L	83091507	000000	000000	070100	004200		G E=255,C=65,B=22
OD05K	OO AM HER	63	1300	1814587	+495055	L	3	21061	L	83091510	000000	000000	100100	004800		G E=255,C=122,B=55
OD05K	OO AM HER	63	1300	1814587	+495055	L	3	21062	L	83091511	000000	000000	115000	003500		G E=255,C=143,B=93
OD05K	OO AM HER	63	1300	1814587	+495055	L	3	21063	L	83091513	000000	000000	131000	003600		G E=255,C=125,B=85
OD05K	OO AM HER	63	1300	1814587	+495055	L	2	16797	L	83091512	000000	000000	123000	003000		G E=184,C=145,B=70
OD05K	OO AM HER	63	1300	1814587	+495055	L	3	21060	L	83091508	000000	000000	083400	004000		G E=250,C=120,B=25
OD05K	OO AM HER	63	1300	1814587	+495055	L	2	16796	L	83091509	000000	000000	092300	003000		G E=152,C=165,B=35
LGFRH	HD 168574	49	0600	1818266	-245622	L	2	16960	L	83100913	000000	000000	133900	001000		G E=119,C=60,B=27
LBFAS	HD 169022	27	0180	1820512	-342437	H	1	02097	L	83102106	000000	000000	065700	000035		G C=1.3X,B=50
LBFAS	HD 169022	27	0180	1820512	-342437	H	3	21317	L	83102107	000000	000000	073100	000120		G C=2X,B=50
LBFAS	HD 169022	27	0180	1820512	-342437	H	3	21316	L	83102106	000000	000000	063500	000040		G C=180,B=32
FA009	HD170054	22	0832	1824480	062900	L	3	21337	LS	83102321	213012	000300	212520	000200	500	V 500$
FA009	HD170054	22	0834	1824480	062900	L	1	02120	LS	83102321	212154	000100	211830	000100	602	V 502$
FA009	HD170563	30	0832	1827230	064342	L	1	02119	L	83102318	000000	000000	185334	000200	502	V
FA009	HD170563	30	0831	1827230	064342	L	3	21335	LS	83102319	192955	000700	191753	000700	500	V 400$
FA009	HD170563	30	0826	1827230	064342	L	3	21336	L	83102320	000000	000000	202129	002100	700	V

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
PHCAL	SERENDIPIT	07	9999	1833119	323917	H	2	16778	L	83091216	000000	000000	161441	028500	V	UVC1(2)RED-3.964KV (-3.6T
FE257	3C382	87	1470	1833120	323918	L	3	21029	L	83091214	000000	000000	145835	037800	343 V	
FE257	3C 382	84	1470	1833120	323918	L	2	16841	L	83092114	000000	000000	145410	026100	338 V	
AFFJL	HD 171834	40	0550	1834131	+063751	H	2	16557	L	83080912	000000	000000	124300	002500	G	C=240,B=38
AFFJL	HD 171834	40	0550	1834131	+063751	L	3	20649	L	83080911	000000	000000	110600	009000	G	E=90,C=5X,B=35
LGFRH	HD 172816	49	0610	1839584	-192001	L	2	16959	L	83100912	000000	000000	125800	001200	G	E=144,C=60,B=27
AFFJL	HD 173667	41	0420	1843305	+202950	L	3	21552	L	83111603	000000	000000	031300	006000	G	E=127,C=5X,B=32
OD06K	HD 174237	66	0590	1845360	+525556	H	3	20809	L	83082615	000000	000000	151100	000930	G	C=3X,B=130
OD06K	HD 174237	66	0590	1845360	+525556	H	3	20808	L	83082614	000000	000000	143000	000530	G	C=1.5X,B=135
FI146	HD174237	26	0600	1845360	525556	H	3	20795	L	83082519	000000	000000	191253	001000	711 V	
FI146	HD174237	26	0592	1845360	525556	L	3	20779	L	83082500	000000	000000	000622	000005	511 V	
FI146	HD174237	26	0602	1845360	525556	H	3	20778	L	83082423	000000	000000	231525	001000	711 V	
FI146	HD174237	26	0603	1845360	525556	H	3	20777	L	83082422	000000	000000	221632	000500	511 V	
BEFPB	HD 174237	26	0590	1845360	+525556	H	3	21486	L	83110904	000000	000000	042600	000550	G	C=210,B=37
FI146	HD174237	26	0599	1845360	525556	H	2	16667	L	83082518	000000	000000	184627	000330	512 V	
FI146	HD174237	26	0602	1845360	525556	H	3	20774	L	83082418	000000	000000	183757	000500	511 V	
FI146	HD174237	26	0592	1845360	525556	H	3	20800	L	83082600	000000	000000	004948	000500	511 V	
FI146	HD174237	26	0593	1845360	525556	L	2	16671	L	83082600	000000	000000	002519	000003	512 V	
FI146	HD174237	26	0593	1845360	525556	L	3	20799	L	83082600	000000	000000	002149	000005	511 V	
FI146	HD174237	26	0594	1845360	525556	H	3	20798	L	83082523	000000	000000	233111	001000	711 V	
FI146	HD174237	26	0595	1845360	525556	H	2	16670	L	83082522	000000	000000	225727	000330	512 V	
FI146	HD174237	26	0596	1845360	525556	H	3	20797	L	83082522	000000	000000	222744	000500	511 V	
FI146	HD174237	26	0600	1845360	525556	H	3	20775	L	83082419	000000	000000	191356	001000	711 V	
FI146	HD174237	26	0596	1845360	525556	H	2	16664	L	83082501	000000	000000	010958	000330	512 V	
FI146	HD174237	26	0601	1845360	525556	L	2	16663	L	83082500	000000	000000	000952	000003	512 V	
FI146	HD174237	26	0599	1845360	525556	H	2	16662	L	83082422	000000	000000	224934	000330	512 V	
FI146	HD174237	26	0599	1845360	525556	H	3	20794	L	83082518	000000	000000	183806	000500	511 V	
FI146	HD174237	26	0602	1845360	525556	H	2	16659	L	83082418	000000	000000	184741	000330	512 V	
OD06K	HD 174237	66	0590	1845360	+525556	H	2	16628	L	83082013	000000	000000	130500	000330	G	C=200,B=32
OD06K	HD 174237	66	0590	1845360	+525556	H	2	16674	L	83082614	000000	000000	144100	000330	G	C=230,B=59
FI146	HD174237	26	0600	1845360	525556	H	3	20763	L	83082401	000000	000000	011128	000500	511 V	
FI146	HD 174237	26	0604	1845360	525556	H	3	20761	L	83082323	000000	000000	234635	000500	511 V	
FI146	HD174237	26	0602	1845360	525556	H	2	16655	L	83082401	000000	000000	012157	000330	511 V	
FI146	HD 174237	26	0603	1845360	525556	H	2	16654	L	83082323	000000	000000	235439	000330	511 V	
FI146	HD174237	26	0596	1845360	525556	H	2	16672	L	83082601	000000	000000	012033	000330	512 V	
FI146	HD174237	26	0605	1845360	525556	H	2	16651	L	83082318	000000	000000	185544	000330	511 V	
FI146	HD174237	26	0604	1845360	525556	H	3	20762	L	83082400	000000	000000	002027	001000	711 V	
FI146	HD174237	26	0589	1845360	525556	H	3	20780	L	83082501	000000	000000	010118	000500	511 V	
FI146	HD174237	26	0604	1845360	525556	H	3	20758	L	83082319	000000	000000	192233	001000	711 V	
FI146	HD 174237	26	0605	1845360	525556	H	3	20757	L	83082318	000000	000000	183344	000500	512 V	
OD06K	HD 174237	66	0590	1845360	+525556	H	3	20728	L	83082013	000000	000000	133400	001000	G	C=2X,B=54
OD06K	HD 174237	66	0590	1845360	+525556	H	3	20727	L	83082012	000000	000000	125400	000500	G	C=100,B=28
FI146	HD174237	26	0596	1845360	525556	H	3	20781	L	83082501	000000	000000	013547	001000	711 V	
QSFJD	OD 3C390.3	84	0000	1845384	+794301	L	3	21143	L	83092322	000000	000000	222400	037000	G	E=191,C=90,B=62
CBFMP	HD 174638	66	0340	1848139	+331759	H	3	21467	L	83110709	000000	000000	091700	000220	G	C=3X,B=45

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
CBFMP	HD 174638	66	0340	1848139	+331759	H	1	02239	L	83110709	000000	000000	092300	000220		G C=2.7X,B=55
CBFMP	HD 174638	66	0340	1848140	+331800	H	3	21448	L	83110411	000000	000000	113300	000100		G E=1.3X,C=150,B=31
CBFMP	HD 174638	66	0340	1848140	+331800	H	1	02215	L	83110411	000000	000000	110500	000200		G E=5X,C=2X,B=60
CBFMP	HD 174638	66	0340	1848140	+331800	H	3	21469	L	83110711	000000	000000	112600	000050		G E=150,C=210,B=28
CBFMP	HD 48914	66	0340	1848140	+331800	D	9	01497	L	83110707	000000	000000	075800	016000		G NO COMMENTS
CBFMP	HD 174638	66	0340	1848140	+331800	H	1	02194	L	83110204	000000	000000	042900	000140		G E=2X,C=225,B=45
CBFMP	HD 174638	66	0340	1848140	+331800	H	1	02195	L	83110205	000000	000000	054100	000500		G E=6X,C=2.6X,B=61
CBFMP	HD 174638	66	0340	1848140	+331800	H	1	02240	L	83110710	000000	000000	104900	000050		G C=220,B=51
CBFMP	HD 174638	66	0340	1848140	+331800	H	3	21433	L	83110210	000000	000000	101700	000100		G E=1.2X,C=100,B=29
CBFMP	HD 174638	66	0340	1848140	+331800	H	3	21447	L	83110410	000000	000000	105900	000130		G E=2X,C=198,B=39
CBFMP	HD 174638	66	0340	1848140	+331800	H	3	21430	L	83110205	000000	000000	053000	000400		G E=5X,C=2.5X,B=52
CBFMP	HD 174638	66	0340	1848140	+331800	H	3	21429	L	83110204	000000	000000	042000	000140		G E=2X,C=205,B=34
CBFMP	OO NULL	99	0750	1848140	+331800	H	3	21466	S	83110708	084400	000000	000000	000000		G B=14
CVFPS	OO CY LYR	54	1500	1850404	+264147	L	2	16779	L	83091223	000000	000000	231600	004000		G C=140,B=31
CVFPS	OO CY LYR	54	1500	1850404	+264147	L	3	21058	L	83091503	000000	000000	034400	004200		G C=110,B=20
CVFPS	OO CY LYR	54	1500	1850404	+264147	L	3	21033	L	83091313	000000	000000	134300	000600		G C=50,B=25
CVFPS	OO CY LYR	54	1500	1850404	+264147	L	2	16794	L	83091503	000000	000000	031000	003000		G C=110,B=25
CVFPS	OO CY LYR	54	1500	1850404	+264147	L	3	21030	L	83091222	000000	000000	220900	006000		G C=160,B=21
HCFSP	HD 175492	39	0110	1852382	+223450	H	2	16811	L	83091708	000000	000000	080400	003000		G C=230,B=45
HEFSS	HD 175362	27	0540	1853171	-372432	H	3	21130	L	83092211	000000	000000	110100	000300		G C=215,B=70
HEFDB	HD 175362	27	0540	1853171	-372432	L	3	21085	L	83091811	000000	000000	114900	000004		G C=200,B=17
HEFDB	HD 175362	27	0540	1853171	-372432	H	3	21105	L	83092008	000000	000000	084900	000300		G C=180,B=32
HEFDB	HD 175362	27	0540	1853171	-372432	L	2	16820	L	83091811	000000	000000	115400	000002		G C=180,B=25
HEFDB	HD 175362	27	0540	1853171	-372432	H	3	21086	L	83091812	000000	000000	125800	000300		G C=215,B=70
HEFDB	HD 175362	27	0540	1853171	-372432	H	3	21106	L	83092009	000000	000000	092600	000300		G C=180,B=33
HEFDB	HD 175362	27	0540	1853171	-372432	H	2	16821	L	83091813	000000	000000	130500	000230		G C=230,B=50
HEFDB	HD 175362	27	0540	1853171	-372432	L	2	16830	L	83092006	000000	000000	064400	000003		G C=225,B=26
HEFDB	HD 175362	27	0540	1853171	-372432	L	3	21104	L	83092006	000000	000000	064800	000003		G C=185,B=18
LGFRH	HD 176124	49	0640	1856274	-192053	L	2	16958	L	83100912	000000	000000	120500	002100		G E=189,C=85,B=32
FM079	HD176162	21	0566	1856352	-125436	H	3	21008	L	83091016	000000	000000	160357	000900	501	V
BEFPB	HD 178475	26	0530	1905310	+360115	H	3	20851	L	83083016	000000	000000	161200	000448		G C=200,B=35
AFFJL	HD 178619	41	0650	1906259	+164619	H	1	02285	L	83111723	000000	000000	234500	004000		G C=165,B=40
AFFJL	HD 178619	41	0650	1906259	+164619	L	3	21570	L	83111720	000000	000000	204100	018000		G C=5-10X,B=43
FA144	HD179343	26	0715	1909324	023217	H	3	21154	L	83092418	000000	000000	181440	006000	401	V
HCFSP	HD 179950	39	0100	1912285	-252041	L	3	21076	SL	83091710	102500	000230	101900	000230		G C=2X,B=30
HCFSP	HD 179950	39	0100	1912285	-252041	H	2	16813	L	83091710	000000	000000	103700	002200		G C=255,B=85
FI146	RS VUL	26	0695	1915320	222101	H	3	20776	L	83082420	000000	000000	203411	004500	511	V
FI146	RS VUL	26	0697	1915320	222101	H	3	20759	L	83082320	000000	000000	205332	004500	511	V
FI146	RS VUL	26	0700	1915320	222101	H	2	16652	L	83082320	000000	000000	202731	002200	511	V
FI146	RS VUL	26	0714	1915320	222101	H	3	20796	L	83082520	000000	000000	204416	004500	511	V
FI146	RS VUL	26	0696	1915320	222101	H	2	16668	L	83082520	000000	000000	201536	002200	512	V
FI146	RS VUL	26	0696	1915320	222101	H	2	16660	L	83082420	000000	000000	200848	002200	512	V
OD06K	HD 180939	66	0690	1915322	+222100	H	3	20725	L	83082010	000000	000000	102900	001800		G C=118,B=30
OD06K	HD 180939	66	0690	1915322	+222100	H	3	20810	L	83082615	000000	000000	155200	003500		G C=225,B=73
OD06K	HD 180939	66	0690	1915322	+222100	H	2	16627	L	83082010	000000	000000	105200	001030		G C=118,B=30

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
OD06K	HD 180939	66	0690	1915322	+222100	H	3	20811	L	83082617	000000	000000	170100	004500		G C=230,B=50
OD06K	HD 180939	66	0690	1915322	+222100	H	3	20726	L	83082011	000000	000000	112600	004500		G C=220,B=48
OD06K	HD 180939	66	0690	1915322	+222100	H	2	16675	L	83082616	000000	000000	163300	002200		G C=240,B=40
BEFPB	HD 180968	26	0540	1915366	+225603	H	3	20848	L	83083014	000000	000000	141000	000600		G C=202,B=35
BEFPB	HD 180968	26	0540	1915366	+225603	H	3	21487	L	83110905	000000	000000	050800	000630		G C=210,B=38
BEFPB	HD 180968	26	0540	1915366	+225603	H	3	20847	L	83083013	000000	000000	132700	000510		G C=190,B=35
CBFMP	HD 181182	66	0650	1916370	+193104	L	3	21468	L	83110710	000000	000000	100400	003000		G E=59,B=33
FA141	HD181296	30	0519	1918494	-543108	H	3	20859	L	83083100	000000	000000	001509	001500	501	V
FM079	HD182568	21	0510	1922092	293120	H	3	21007	L	83091015	000000	000000	152009	000245	501	V
FA141	HD183133	21	0683	1925446	-151220	H	3	20857	L	83083021	000000	000000	214908	002500	501	V
FA144	HD183656	26	0630	1928028	032016	H	2	16865	L	83092416	000000	000000	161744	002500	703	V
FA144	HD183656	26	0629	1928028	032016	H	3	21152	L	83092415	000000	000000	154703	002300	500	V
FA144	HD184279	26	0727	1931072	033908	H	3	21153	L	83092416	000000	000000	165520	002600	400	V
FA144	HD184279	26	0726	1931072	033908	H	2	16866	L	83092417	000000	000000	172540	002000	503	V
AFFJL	HD 184663	40	0640	1932544	+024805	H	1	02274	L	83111523	000000	000000	234100	002500		G C=155,B=38
AFFJL	HD 184663	40	0640	1932544	+024805	L	3	21550	L	83111520	000000	000000	203200	018000		G E=1116,C=5-10X,B=45
HEFSS	HD 184927	27	0760	1933353	+310954	L	3	21129	L	83092209	000000	000000	094000	000012		G C=205,B=16
HEFSS	HD 184927	27	0760	1933353	+310954	L	2	16845	L	83092209	000000	000000	094400	000009		G C=180,B=25
HEFSS	HD 184927	27	0760	1933353	+310954	H	2	16846	L	83092210	000000	000000	105500	000210		G C=200,B=42
AFFJL	HD 185124	40	0550	1935081	-044538	H	1	02275	L	83111602	000000	000000	022800	001800		G E=99,C=200,B=50
AFFJL	HD 185124	40	0550	1935081	-044538	L	3	21551	L	83111600	000000	000000	002200	012000		G E=133,C=5-10X,B=53
CCFAD	HD 232078	47	0850	1935566	+164135	L	2	16544	L	83080704	000000	000000	042300	012000		G E=81,C=75,B=38
CCFTS	HD 185758	45	0440	1937516	+175351	L	3	21479	L	83110809	000000	000000	092800	006000		G E=55,C=215,B=42
IGFBS	HD 332407	23	0850	1939197	+290135	H	3	21524	L	83111220	000000	000000	203600	026000		G C=1.5X,B=70
PHCAL	HM/SGE	57	1118	1939410	163733	H	3	21299	L	83101514	000000	000000	145556	019000	162	V
NPFHB	OO UU SGE	70	1470	1939550	+165806	L	3	20893	L	83090223	000000	000000	230000	006000		G C=58,B=22
NPFHB	OO UU SGE	70	1470	1939550	+165806	L	2	16719	L	83090300	000000	000000	000500	014300		G C=130,B=40
FA060	NGC6826	70	0979	1943272	502410	H	3	20869	L	83083121	000000	000000	215121	008502	451	V
FI041	V 3885 SGR	63	1046	1944130	-420736	L	3	20663	L	83081118	000000	000000	185900	000530	500	V
FI041	V 3885 SGR	63	1046	1944130	-420736	H	3	20664	L	83081119	000000	000000	193812	030000	503	V
FI041	V 3885 SGR	63	1051	1944130	-420736	L	2	16575	L	83081119	000000	000000	190758	000345	502	V
FC109	HD187076	49	0380	1945090	182430	H	2	16807	L	83091615	000000	000000	152934	002000	562	V
FC109	HD187076	49	0384	1945090	182430	H	3	21070	L	83091614	000000	000000	144018	004500	501	V
FM079	HD187459	23	0656	1946561	331840	H	3	21018	L	83091017	000000	000000	173536	004500	601	V
APFRP	HD 187473	36	0720	1948050	-273600	L	1	02188	L	83103112	000000	000000	120700	000140		G C=200,B=35
APFRP	HD 187473	36	0720	1948050	-273600	L	3	21329	L	83102309	000000	000000	093900	000320		G C=200,B=46
APFRP	HD 187473	36	0720	1948050	-273600	L	1	02153	L	83102712	000000	000000	122000	000140		G C=202,B=40
APFRP	HD 187473	36	0720	1948050	-273600	L	1	02151	SL	83102709	091000	000200	090700	000148		G C=1.5X,B=65
APFRP	HD 187473	36	0720	1948050	-273600	H	3	21392	L	83102909	000000	000000	095600	004500		G C=206,B=70
APFRP	HD 187473	36	0720	1948050	-273600	L	1	02113	L	83102309	000000	000000	095300	000205		G C=240,B=59
APFRP	HD 187473	36	0720	1948050	-273600	L	1	02114	L	83102311	000000	000000	110300	000151		G C=220,B=43
APFRP	HD 187473	36	0720	1948050	-273600	L	3	21416	L	83103112	000000	000000	121900	000320		G C=192,B=27
APFRP	HD 187473	36	0720	1948050	-273600	L	3	21393	L	83102911	000000	000000	114900	000320		G C=190,B=27
APFRP	HD 187473	36	0720	1948050	-273600	H	1	02169	L	83102910	000000	000000	104500	003000		G C=228,B=65
APFRP	HD 187473	36	0720	1948050	-273600	L	3	21355	L	83102510	000000	000000	100700	000148		G C=195,B=35

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
APFRP	HD 187473	36	0720	1948050	-273600	L	3	21376	L	83102709	000000	000000	093100	000329		G C=255,B=48
APFRP	HD 187473	36	0720	1948050	-273600	H	3	21330	L	83102311	000000	000000	111700	004000		G C=190,B=66
APFRP	HD 187473	36	0720	1948050	-273600	L	1	02137	L	83102509	000000	000000	095600	000140		G C=245,B=93
APFRP	HD 187473	36	0720	1948050	-273600	H	3	21417	L	83103113	000000	000000	130000	004800		G C=180,B=40
APFRP	HD 187473	36	0720	1948054	-273600	L	1	02170	L	83102912	000000	000000	120400	000140		G C=201,B=35
ZAFNO	OO CI CYG	57	1050	1948210	+353327	L	1	02124	SL	83102407	073000	001200	075800	001200		G E=1.3X,C=140,B=67
ZAFNO	OO CI CYG	57	1050	1948210	+353327	L	2	16630	SL	83082016	170800	001500	164600	001500		G E=2X,C=110,B=30
ZAFNO	OO CI CYG	57	1050	1948210	+353327	L	3	20731	L	83082017	000000	000000	173300	001630		G E=2X,B=20
ZAFNO	OO CI CYG	57	1050	1948210	+353327	L	3	21342	SL	83102406	070900	001500	064900	001500		G E=1.1X,C=47,B=30
ZAFNO	OO CI CYG	57	1050	1948210	+353327	L	3	20730	SL	83082016	162200	001500	160100	001500		G E=2X,B=23
FA255	HD187811	26	0502	1948548	222858	H	2	16758	L	83090914	000000	000000	143839	000220	602	V
FA255	HD187811	26	0502	1948548	222858	H	3	20987	L	83090914	000000	000000	144408	000220	500	V
BEFPB	HD 187811	26	0490	1948548	+222854	H	3	21488	L	83110905	000000	000000	055300	000215		G C=195,B=35
BEFPB	HD 187811	26	0490	1948548	+222854	H	3	20849	L	83083014	000000	000000	144900	000200		G C=185,B=33
FA255	HD187811	26	0495	1948548	222858	H	3	21021	L	83091120	000000	000000	200728	000220	500	V
MLFCG	HD 188209	13	0560	1950263	+465351	H	3	21591	L	83112010	000000	000000	104500	000400		G C=225,B=40
FA085	HD188112	28	1022	1951260	-282815	L	3	21101	L	83091918	000000	000000	180100	000100	500	V
FA085	HD188112	28	1178	1951260	-282815	L	1	01994	L	83091917	000000	000000	175654	000136	502	V
FM079	HD188892	20	0508	1954044	382110	H	3	20974	L	83090819	000000	000000	193751	000700	701	V
CVFJP	OO UU AQL	54	1600	1954351	-092726	L	3	21543	L	83111420	000000	000000	204300	048000		G E=137,C=143,B=100
EI219	1E2003+22	59	1500	2003320	223121	L	1	02033	L	83101217	000000	000000	171246	011100	443	V
EI219	1E2003+22	59	1500	2003320	223121	L	3	21281	L	83101215	000000	000000	150815	011100	351	V
EI219	1E2003+22	59	1500	2003320	223121	L	3	21282	L	83101219	000000	000000	190818	016000	352	V
CVFJN	X 2003+225	63	0000	2003325	+223127	L	1	02322	L	83112305	000000	000000	052600	002500		G C=212,B=175
CVFJN	X 2003+225	63	0000	2003325	+223127	L	3	21621	L	83112305	000000	000000	055400	002500		G E=195,C=203,B=172
CVFJN	X 2003+225	63	0000	2003325	+223127	L	3	21620	L	83112304	000000	000000	045600	002500		G E=142,C=152,B=125
CVFJN	X 2003+225	63	0000	2003332	+223131	L	1	02323	L	83112310	000000	000000	102200	002500		G E=143,C=121,B=80
CVFJN	X 2003+225	63	0000	2003332	+223131	L	3	21623	L	83112310	000000	000000	105100	006000		G E=141,C=73,B=47
CVFJN	X 2003+225	63	0000	2003332	+223131	L	3	21622	L	83112309	000000	000000	095200	002500		G E=136,C=122,B=100
IGFBS	HD 192035	20	0820	2009177	+473950	H	3	21684	L	83120500	000000	000000	002900	006500		G C=165,B=50
EA143	HD192163	11	0743	2010170	381214	H	1	02443	L	83122011	000000	000000	111704	002500	452	V
EA143	HD192163	11	0743	2010170	381214	H	3	21820	L	83122010	000000	000000	102943	004000	371	V
EA143	HD192163	11	0745	2010171	381215	H	1	02433	L	83121915	000000	000000	153728	002500	452	V
EA143	HD192163	11	0739	2010171	381215	H	3	21810	L	83121916	000000	000000	160840	004000	371	V
EA143	HD192163	11	0746	2010171	381215	H	1	02434	L	83121916	000000	000000	165348	002500	461	V
EA143	HD192163	11	0747	2010171	381215	L	3	21811	LS	83121917	172539	000025	172230	000040	470	V 350$
EA143	HD192163	11	0746	2010171	381215	H	3	21809	L	83121914	000000	000000	145110	004000	470	V
EA143	HD192163	11	0742	2010177	381215	H	3	21822	L	83122013	000000	000000	130342	004000	371	V
EA143	HD192163	11	0741	2010177	381215	L	3	21823	LS	83122014	142308	000025	141929	000040	471	V 351$
EA143	HD192163	11	0743	2010177	381215	H	3	21821	L	83122011	000000	000000	114745	004000	371	V
EA143	HD192163	11	0739	2010177	381215	H	3	21826	L	83122017	000000	000000	171725	003000	351	V
EA143	HD192163	11	0741	2010177	381215	H	1	02447	L	83122016	000000	000000	164914	002500	452	V
EA143	HD192163	11	0742	2010177	381215	H	3	21825	L	83122016	000000	000000	160613	004000	371	V
EA143	HD192163	11	0741	2010177	381215	H	1	02446	L	83122015	000000	000000	153806	002500	452	V
EA143	HD192163	11	0744	2010177	381215	H	3	21824	L	83122014	000000	000000	145452	004000	371	V

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
EA143	HD192163	11	0741	2010177	381215	H	1	02445	L	83122013	000000	000000	134734	002500	452	V
EA143	HD192163	11	0743	2010177	381215	H	1	02444	L	83122012	000000	000000	123320	002500	452	V
FC109	HD192577	47	0399	2012030	463520	H	3	21078	L	83091714	000000	000000	145626	001200	501	V
FC109	HD192577	47	0400	2012030	463520	H	2	16816	L	83091715	000000	000000	151223	001200	663	V
LBFAS	HD 192640	36	0490	2012396	+363908	H	3	21321	L	83102112	000000	000000	123900	002500		G C=1.1X,B=59
LBFAS	HD 192640	36	0490	2012396	+363908	H	1	02100	L	83102113	000000	000000	131500	001200		G C=2X,B=50
FA060	NGC6891	70	1115	2012480	123254	L	3	20868	S	83083120	203554	003500	000000	000000	551	V
BEFPB	HD 192685	26	0480	2013087	+252617	H	1	02245	L	83110911	000000	000000	113800	000100		G C=205,B=45
BEFPB	HD 192685	26	0480	2013087	+252617	H	3	21494	L	83110911	000000	000000	113300	000130		G C=190,B=35
BEFPB	HD 192685	26	0480	2013087	+252617	H	3	20850	L	83083015	000000	000000	153100	000130		G C=195,B=35
HCFSP	HD 192713	39	0040	2013205	+232117	L	1	02468	L	83122218	000000	000000	184600	000200		G E=227,C=200,B=35
HCFSP	HD 192713	39	0515	2013205	+232117	L	3	21073	L	83091623	000000	000000	230900	000230		G C=180,B=20
HCFSP	HD 192713	39	0040	2013205	+232117	L	3	21907	L	83123001	000000	000000	014600	001000		G E=106,C=160,B=27
HCFSP	HD 192713	39	0520	2013205	+232117	L	3	21905	L	83122919	000000	000000	190100	000600		G E=58,C=50,B=18
HCFSP	HD 192713	39	0040	2013205	+232117	H	1	02469	L	83122219	000000	000000	193300	003500		G E=215,C=105,B=40
HCFSP	HD 192713	39	0040	2013205	+232117	L	3	21848	L	83122218	000000	000000	185400	001200		G E=95,C=50,B=25
HCFSP	HD 192713	39	0520	2013205	+232117	L	1	02526	L	83122918	000000	000000	185400	000140		G E=237,C=150,B=35
HCFSP	HD 192713	39	0040	2013205	+232117	H	3	21849	L	83122220	000000	000000	201400	028000		G E=203,B=72
HCFSP	HD 192713	39	0515	2013205	+232117	L	2	16809	L	83091623	000000	000000	231600	004000		G E=210,C=140,B=30
HCFSP	HD 192713	39	0040	2013205	+232117	H	3	21906	L	83122921	000000	000000	211800	022500		G E=134,C=195,B=110
FC109	HD192713	39	0545	2013210	232100	H	2	16793	L	83091417	000000	000000	171747	008000	564	V
FC109	HD192713	39	0557	2013210	232100	H	3	21055	L	83091414	000000	000000	144006	015000	502	V
OD19K	0032 CYGNI	39	0420	2013554	+473335	H	3	21693	L	83120509	000000	000000	090800	003000		G C=180,B=40
OD19K	0032 CYGNI	39	0420	2013554	+473335	H	1	02353	L	83120508	000000	000000	085400	000730		G E=238,C=120,B=42
VVFIA	HD 192909	39	0420	2013555	+473336	H	3	21149	L	83092412	000000	000000	121300	001300		G C=190,B=115
VVFIA	HD 192909	39	0420	2013555	+473336	H	2	16685	L	83082810	000000	000000	102600	001500		G C=1.5X,C=210,B=60
VVFIA	HD 192909	39	0420	2013555	+473336	H	1	02162	L	83102813	000000	000000	134100	000700		G E=192,C=125,B=40
VVFIA	HD 192909	39	0420	2013555	+473336	H	2	16862	L	83092412	000000	000000	123500	001030		G E=255,C=180,B=58
VVFIA	HD 192909	39	0420	2013555	+473336	H	3	21150	L	83092413	000000	000000	130500	001800		G C=180,B=98
VVFIA	HD 192909	39	0420	2013555	+473336	H	2	16686	L	83082811	000000	000000	112400	000600		G E=171,C=130,B=41
VVFIA	HD 192909	39	0420	2013555	+473336	H	3	21387	L	83102813	000000	000000	130400	003200		G C=175,B=35
VVFIA	HD 192909	39	0420	2013555	+473336	H	2	16863	L	83092413	000000	000000	134000	000615		G E=167,C=85,B=32
VVFIA	HD 192909	39	0420	2013555	+473336	H	1	02161	L	83102812	000000	000000	123700	001330		G E=2X,C=180,B=45
VVFIA	HD 192909	39	0420	2013555	+473336	H	3	20822	L	83082810	000000	000000	104600	002400		G C=240,B=130
FA074	HD193237	23	0503	2015564	375236	H	3	21897	L	83122813	000000	000000	131739	002500	661	V
FA074	HD193237	23	0506	2015565	375236	H	1	02516	L	83122813	000000	000000	130727	000530	661	V
FA074	HD193237	23	0487	2015565	375236	L	3	21898	L	83122814	000000	000000	141029	000018	501	V
MLFCG	HD 193322	12	0590	2016206	+403431	H	3	21592	L	83112011	000000	000000	112700	000700		G C=160,B=32
HCFSP	HD 193495	39	0890	2018122	-145627	H	3	21600	L	83112108	000000	000000	081200	000400		G C=235,B=92
HCFSP	HD 193495	39	0890	2018122	-145627	H	1	02305	L	83112108	000000	000000	080200	000400		G C=1.5X,B=115
FI166	PU VUL	63	0875	2019011	212443	L	2	16848	L	83092218	000000	000000	181028	003000	701	V
OBFGS	HD 193924	20	0194	2021421	-565349	H	1	02138	L	83102511	000000	000000	111700	000004		G C=190,B=40
OBFGS	HD 193924	20	0194	2021421	-565349	H	3	21356	L	83102511	000000	000000	111100	000007		G C=220,B=37
WDFFB	00 GD 391	37	1330	2028049	+390323	H	3	20842	L	83083003	000000	000000	031400	039000		G C=155,B=75
FA218	BD+404227	64	0910	2031273	410831	L	3	21920	L	83123014	000000	000000	140854	021800	441	V

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
FA218	BD+40 4227	64	0914	2031273	410831	L	3	21451	L	83110416	000000	000000	163057	019600 331 V
LGFRH	HD 196777	49	0510	2037123	-181858	L	2	16957	L	83100911	000000	000000	111800	000630 G C=72,B=29
CCFTA	OO AT MIC	48	1010	2038437	-323647	L	3	21521	L	83111211	000000	000000	112200	002500 G E=115,B=20
CCFTA	OO AT MIC	48	1010	2038449	-323646	L	3	21185	L	83092810	000000	000000	101100	003500 G E=255,B=255
CCFTA	OO AT MIC	48	1010	2038449	-323646	L	2	16888	L	83092810	000000	000000	105300	002000 G E=4X,B=130
AFFJL	HD 197373	41	0600	2039142	+601926	L	3	21571	L	83111800	000000	000000	005200	012000 G E=125,C=5-10X,B=85
AFFJL	HD 197373	41	0600	2039142	+601926	H	1	02286	L	83111802	000000	000000	025700	003000 G E=141,C=240,B=90
CCFTA	OO AU MIC	48	0860	2042040	-313118	L	1	02257	L	83111210	000000	000000	103700	001500 G E=255,C=65,B=35
CCFTA	OO AU MIC	48	0860	2042040	-313118	L	3	21520	L	83111210	000000	000000	100100	003000 G E=191,B=25
FSFMG	OO AU MIC	48	0861	2042046	-313106	L	3	21351	L	83102503	000000	000000	030100	004000 G B=40
FSFMG	OO AU MIC	48	0861	2042046	-313117	L	1	02122	L	83102402	000000	000000	022100	002000 G E=1.5X,C=80,B=40
FSFMG	OO AU MIC	48	0861	2042046	-313117	L	3	21340	L	83102402	000000	000000	025300	006000 G B=50
FSFMG	OO AU MIC	48	0861	2042046	-313117	L	1	02132	L	83102500	000000	000000	004100	001100 G E=199,C=75,B=35
FSFMG	OO AU MIC	48	0861	2042046	-313117	L	3	21350	L	83102501	000000	000000	011500	006000 G B=31
FSFMG	OO AU MIC	48	0861	2042046	-313117	L	1	02123	L	83102404	000000	000000	040200	002000 G E=1.2X,C=90,B=50
FSFMG	OO AU MIC	48	0861	2042046	-313106	L	1	02133	L	83102502	000000	000000	023000	001100 G E=193,C=61,B=40
FSFMG	OO AU MIC	48	0861	2042046	-313117	L	3	21339	L	83102401	000000	000000	011300	006000 G B=35
CCFTA	OO AU MIC	48	0860	2042049	-313117	L	2	16887	L	83092809	000000	000000	092400	001500 G E=255,C=80,B=50
CCFTA	OO AU MIC	48	0860	2042049	-313117	L	3	21184	L	83092808	000000	000000	084000	003500 G E=168,B=100
CCFTA	OO AU MIC	48	0860	2042049	-313117	L	3	21183	L	83092807	000000	000000	073700	002000 G E=131,B=35
CCFTA	OO AU MIC	48	0860	2042049	-313117	L	2	16886	L	83092808	000000	000000	081100	001500 G E=1X,C=70,B=38
FI054	HBV475	57	1300	2049026	352337	L	1	02391	L	83121112	000000	000000	121041	006000 351 V
FI054	HBV 475	57	1307	2049026	352337	H	3	21750	L	83121113	000000	000000	131525	027000 332 V
FI054	HBV 475	57	1310	2049026	352337	L	3	21749	L	83121110	000000	000000	105433	007000 251 V
NSFJR	OO CYGNUS	75	0000	2053444	+314708	D	9	01504	L	83120809	000000	000000	091000	016000 G NO COMMENTS
NSFJR	OO CYGNUS	75	0000	2053444	+314708	L	3	21723	L	83120809	000000	000000	095700	079000 G E=172,C=185,B=130
FM117	CYG LOOP	75	9999	2053445	314709	E	9	01505	2	83120810	000000	000000	102000	016000 V
NSFJR	OOSKY BKGD	07	9999	2053470	+314611	L	1	02369	L	83120809	000000	000000	095900	070000 G B=130
CBFMP	HD 199454	66	0800	2054420	+045330	L	1	02197	L	83110211	000000	000000	110300	000600 G C=2.5X,B=38
CBFMP	HD 199454	66	0800	2054420	+045330	L	3	21434	L	83110211	000000	000000	112600	001200 G C=4X,B=21
CCFEB	HD 199766	41	0530	2056345	+040602	L	3	21271	L	83101113	000000	000000	131000	003800 G C=8X,B=20
CCFEB	HD 199766	41	0530	2056345	+040602	H	2	16966	L	83101112	000000	000000	122700	002500 G C=218,B=35
BEFTS	HD 200120	26	0450	2058070	+471930	H	3	20672	L	83081312	000000	000000	122800	000300 G C=2X,B=60
BEFTS	HD 200120	26	0450	2058070	+471930	H	3	20671	L	83081311	000000	000000	114300	000200 G C=1.2X,B=45
HSFTS	HD 205637	23	0470	2058070	+471930	H	3	21686	L	83120502	000000	000000	023000	000300 G C=2X,B=60
HSFTS	HD 200120	26	0450	2058070	+471930	H	3	21685	L	83120502	000000	000000	020300	000120 G C=200,B=38
BEFTS	HD 200120	26	0450	2058070	+471930	H	3	21169	L	83092512	000000	000000	124300	000200 G C=1.5X,B=50
BEFTS	HD 200120	26	0450	2058070	+471930	H	3	21170	L	83092513	000000	000000	131200	000300 G C=3X,B=60
BEFTS	HD 200120	26	0450	2058070	+471930	H	2	16870	L	83092513	000000	000000	131900	000140 G C=1.5X,B=40
FA152	HD200120	20	0491	2058074	471930	H	3	21769	L	83121410	000000	000000	105742	000130 501 V
FA152	HD200120	20	0502	2058074	471930	H	3	20641	L	83080819	000000	000000	192430	000130 500 V
FA152	HD200120	20	0571	2058074	471930	H	3	21580	L	83111918	000000	000000	183803	000130 501 V
HCFHB	CP62 06195	44	0990	2102039	-614538	L	3	21249	L	83100623	000000	000000	231800	015000 G C=70,B=43
HCFHB	CP62 06195	44	0990	2102040	-614539	L	2	16937	L	83100622	000000	000000	225600	001500 G C=110,B=25
CVFJR	OO VY AQR	54	1190	2109289	-090205	L	1	02370	L	83120900	000000	000000	081100	000800 G C=220,B=42

PRD	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
CVFJR	OO VY AQR	54	1170	2109289	-090205	L	3	21720	SL	83120803	033900	002000	032200	001000		G C=200,B=30
CVFJR	OO VY AQR	54	1170	2109289	-090205	L	1	02367	L	83120804	000000	000000	041600	000700		G C=198,B=42
CVFJR	OO VY AQR	54	1170	2109289	-090205	L	3	21719	L	83120802	000000	000000	023200	001000		G C=185,B=22
CVFJR	OO VY AQR	54	1190	2109289	-090205	L	3	21724	L	83120823	000000	000000	235400	001100		G C=200,B=20
CVFJR	OO VY AQR	54	1190	2109289	-090205	L	3	21725	S	83120900	004000	002200	000000	000000		G C=225,B=45
CVFJR	OO VY AQR	54	1170	2109289	-090205	L	1	02366	L	83120802	000000	000000	024900	001500		G C=2X,B=55
CVFJR	OO VY AQR	54	1190	2109290	-090206	L	3	21726	L	83120901	000000	000000	015200	001100		G C=220,B=40
CVFJR	OO VY AQR	54	1190	2109290	-090206	L	1	02371	L	83120901	000000	000000	012300	000800		G C=210,B=52
FM079	HD202214	20	0582	2110318	594649	H	3	21011	L	83091019	000000	000000	190546	001300	601	V
HCFHB	HD 202020	44	0930	2110582	-095008	L	2	16939	L	83100708	000000	000000	083800	001230		G C=135,B=24
HCFHB	HD 202020	44	0930	2110582	-095008	L	3	21250	L	83100706	000000	000000	063200	012000		G C=65,B=43
HCFSP	HD 202447	39	0330	2113194	+050224	H	2	16812	L	83091709	000000	000000	092500	001100		G C=255,B=40
CCFFF	HD 203251	47	0840	2118441	-152207	F	9	01498	L	83110720	000000	000000	202600	016000		G NO COMMENTS
CCFF	HD 203251	47	9999	2118442	-152208	L	3	21474	L	83110720	000000	000000	204200	021000		G NO COMMENTS
FA085	PHL17	28	1407	2128000	-031600	L	3	21102	L	83091919	000000	000000	193605	002000	401	V
FA085	PHL 17	28	1409	2128000	-031600	L	1	01995	L	83091918	000000	000000	185453	003600	502	V
FE056	PKS2128-12	85	1600	2128526	-122021	L	3	21704	L	83120611	000000	000000	111501	039200	353	V
QSFWS	OOIIZW 136	84	1490	2130012	+095501	L	3	21902	L	83122818	000000	000000	185100	015000		G E=1.1X,C=110,B=45
QSFWS	OOIIZW 136	84	1490	2130012	+095501	L	1	02520	L	83122822	000000	000000	222800	020000		G C=3X,B=125
FA085	JL82	28	1242	2131240	-730200	L	1	01993	L	83091916	000000	000000	163929	001000	503	V
FA085	JL82	28	1245	2131240	-730200	L	3	21100	L	83091916	000000	000000	161431	000600	501	V
HSFTS	HD 205637	23	0470	2134170	-194128	H	3	21688	L	83120503	000000	000000	033700	000200		G C=1.2X,B=44441
HSFTS	HD 205637	23	0470	2134170	-194128	H	3	21164	L	83092509	000000	000000	095100	000150		G C=255,B=42
HSFTS	HD 205637	23	0470	2134170	-194128	H	3	21381	L	83102806	000000	000000	064500	000400		G C=4X,B=65
HSFTS	HD 205637	23	0470	2134170	-194128	H	3	21380	L	83102806	000000	000000	061500	000150		G C=247,B=40
HSFTS	HD 205637	23	0470	2134170	-194128	H	3	21687	L	83120503	000000	000000	030800	000110		G C=180,B=31
HSFTS	HD 205637	23	0470	2134170	-194128	H	3	21165	L	83092510	000000	000000	102000	000300		G C=3X,B=60
IGFBS	BD+48 3437	23	0870	2134279	+490730	H	3	21705	L	83120618	000000	000000	183300	024000		G C=1.1X,B=72
SPFRN	OO 54 ALEX	05	9999	2134499	-060025	L	2	16799	L	83091600	000000	000000	003900	016200		G C=215,B=40
FE056	PKS2135-14	85	1550	2135011	-144627	L	3	21694	L	83120511	000000	000000	111644	039000	333	V
EI029	CYG X-2	66	1450	2142362	380527	L	3	21068	L	83091517	000000	000000	175118	016400	101	V
EI029	CYG X-2	59	1450	2142369	380527	L	3	21134	L	83092214	000000	000000	144939	017600	302	V
EI029	CYG X-2	59	1450	2142369	380527	L	3	21112	L	83092018	000000	000000	182530	017200	221	V
EI029	CYG X-2	59	1450	2142369	380527	L	3	21087	L	83091814	000000	000000	143700	018800	232	V
LGFRH	HD 207005	49	0590	2143363	-093027	L	2	16954	L	83100908	000000	000000	084300	001330		G E=196,C=67,B=27
IBFSP	HD 207739	39	0850	2147597	+434353	H	3	21074	L	83091700	000000	000000	001800	023000		G C=140,B=58
IBFSP	HD 207739	39	0850	2147597	+434353	L	3	21075	L	83091706	000000	000000	063800	001200		G C=170,B=20
IBFSP	HD 207739	39	0850	2147598	+434354	L	2	16833	L	83092022	000000	000000	221500	000400		G C=175,B=25
IBFSP	HD 207739	39	0850	2147598	+434354	H	3	21114	L	83092022	000000	000000	224600	023000		G C=140,B=60
IBFSP	HD 207739	39	0850	2147598	+434354	H	3	21024	L	83091122	000000	000000	225200	030000		G C=190,B=100
IBFSP	HD 207739	39	0850	2147598	+434354	L	2	16770	L	83091122	000000	000000	221900	000330		G E=168,C=140,B=23
IBFSP	HD 207739	39	0850	2147598	+434354	L	3	21023	L	83091122	000000	000000	220300	000900		G C=115,B=15
IBFSP	HD 207739	39	0850	2147598	+434354	L	3	21113	L	83092021	000000	000000	215800	001100		G C=165,B=23
IBFSP	HD 207739	39	0850	2147598	+434354	L	2	16810	L	83091700	000000	000000	005700	000400		G E=189,C=160,B=25
IBFSP	HD 207739	39	0850	2147598	+434354	L	3	20952	L	83090623	000000	000000	234900	000800		G C=110,B=15

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
IBFSP	HD 207739	39	0850	2147598	+434354	L	2	16747	L	83090700	000000	000000	000600	000200		G E=130,C=105,B=25
IBFSP	HD 207739	39	0850	2147598	+434354	L	2	16855	L	83092313	000000	000000	133000	000330		G E=211,C=170,B=32
IBFSP	HD 207739	39	0850	2147598	+434354	H	2	16771	L	83091203	000000	000000	030200	009000		G E=143,C=115,B=40
IBFSP	HD 207739	39	0850	2147598	+434354	L	3	21141	L	83092312	000000	000000	125600	001000		G C=215,B=85
IBFSP	HD 207739	39	0850	2147598	+434354	L	2	16851	L	83092306	000000	000000	064500	000400		G E=228,C=180,B=30
IBFSP	HD 207739	39	0850	2147598	+434354	L	3	21136	L	83092306	000000	000000	062800	001000		G C=165,B=21
IBFSP	HD 207739	39	0850	2147598	+434354	H	3	20953	L	83090700	000000	000000	003900	022000		G C=140,B=63
IBFSP	HD 207739	39	0850	2147598	+434354	L	2	16748	L	83090703	000000	000000	035100	000300		G E=169,C=130,B=25
IBFSP	HD 207739	39	0850	2147598	+434354	L	2	16772	L	83091207	000000	000000	073000	000700		G E=1.5,C=210,B=26
PHCAL	BD+28 4211	16	1058	2148560	283734	L	1	02496	L	83122610	000000	000000	104202	000050	502	V
PHCAL	BD+28 4211	16	1058	2148560	283735	L	1	02360	LS	83120711	113427	000230	113007	000050	502	V 502$
PHCAL	BD284211	12	1063	2148560	283735	L	2	17001	L	83111612	000000	000000	125546	000100	501	V UVC1(2) -5KV,DAC=109
PHCAL	BD+28 4211	16	1058	2148560	283734	L	1	02497	L	83122611	000000	000000	113821	000050	501	V
PHCAL	BD+284211	16	1042	2148560	283735	L	1	02530	LS	83123013	134117	000230	133619	000050	502	V 502$
PHCAL	BD+284211	16	1049	2148560	283734	L	3	21883	L	83122613	000000	000000	130229	000117	500	V TRAILED R=0.26,I=1
PHCAL	BD+28 4211	16	1060	2148560	283734	L	3	21882	L	83122611	000000	000000	114241	000026	500	V
PHCAL	BD+284211	16	1060	2148560	283734	L	3	21881	L	83122610	000000	000000	104620	000026	500	V
PHCAL	BD+284211	16	1054	2148560	283734	L	1	02517	LS	83122815	150848	000230	150509	000050	503	V 603$
PHCAL	BD+284211	16	1055	2148560	283734	L	1	02498	L	83122612	000000	000000	123626	000320	502	V TRAILED R=0.10 I=1
PHCAL	BD284211	12	1053	2148560	283735	L	2	17002	L	83111613	000000	000000	132018	000122	501	V UVC1(2)=-4.5KV DAC=98
PHCAL	BD+284211	16	1054	2148560	283734	L	3	21899	LS	83122815	151743	000118	151435	000026	501	V 601$
PHCAL	BD284211	12	1053	2148560	283735	L	2	17003	L	83111613	000000	000000	135108	000122	502	V UVC1-4(2)=-4.5KV DAC=98
PHCAL	BD+28 4211	16	1061	2148560	283735	L	3	21088	L	83091818	000000	000000	183549	000026	500	V
PHCAL	BD+28 4211	15	1057	2148560	283735	L	3	20994	L	83090921	000000	000000	211211	000026	500	V
PHCAL	BD+28 4211	16	1053	2148560	283735	L	3	21089	L	83091819	000000	000000	193116	000051	400	V TRAILED,RATE=0.256,ITER=1
PHCAL	BD+28 4211	16	1058	2148560	283735	L	2	16822	L	83091818	000000	000000	184048	000100	502	V
PHCAL	BD+28 4211	16	1054	2148560	283735	L	2	16823	L	83091819	000000	000000	194940	000330	502	V TRAILED RATE=0.095,ITER=1
PHCAL	BD+284211	16	1055	2148560	283735	L	3	21712	LS	83120711	114328	000118	114035	000026	500	V 600$
HSFCW	BD+28 4211	16	1050	2148574	+283734	L	3	21880	L	83122609	000000	000000	093000	000058		G C=2X,B=25
HSFCW	BD+28 4211	16	1050	2148574	+283734	L	1	02495	L	83122609	000000	000000	093500	000158		G C=2.5X,B=35
HSFCW	BD+28 4211	16	1050	2148574	+283734	L	3	21887	L	83122622	000000	000000	225700	000058		G C=2.3X,B=15
HSFCW	BD+28 4211	16	1050	2148574	+283734	L	1	02504	L	83122623	000000	000000	230700	000220		G C=3X,B=35
HSFCW	BD+28 4211	16	1050	2148574	+283734	L	1	02491	SL	83122603	031700	000140	031300	000050		G C=200,B=35
PHCAL	BD+28 4211	16	1050	2148574	+283734	L	2	16910	SL	83100206	065000	000300	064500	000100		G C=165,B=25
PHCAL	BD+28 4211	16	1050	2148574	+283734	H	2	16829	L	83092003	000000	000000	034700	003500		G C=141,B=31
PHCAL	BD+28 4211	16	1050	2148574	+283734	L	1	02357	L	83120606	000000	000000	060700	000050		G C=220,B=35
HSFCW	BD+28 4211	16	1050	2148574	+283734	L	3	21876	L	83122604	000000	000000	043400	000136		G C=200,B=23
PHCAL	BD+28 4211	16	1050	2148574	+283734	L	3	21700	L	83120606	000000	000000	060000	000026		G C=220,B=15
HSFCW	BD+28 4211	16	1050	2148574	+283734	L	3	21875	SL	83122602	030500	000052	025700	000026		G C=195,B=20
PHCAL	BD+28 4211	16	1050	2148574	+283734	L	3	21213	SL	83100207	073500	000118	073100	000026		G C=180,B=20
PHCAL	BD+28 4211	16	1050	2148574	+283734	L	1	01974	L	83081516	000000	000000	161600	000050		G C=210,B=32
PHCAL	BD+28 4211	16	1050	2148574	+283734	D	9	01466	L	83081410	000000	000000	104100	016000		G NO COMMENTS
PHCAL	BD+28 4211	16	1050	2148574	+283734	L	2	16587	L	83081410	000000	000000	105700	000100		G C=185,B=25
HSFCW	BD+28 4211	16	1050	2148574	+283734	L	1	02492	L	83122604	000000	000000	041700	000305		G C=185,B=40
PHCAL	BD+28 4211	16	1050	2148574	+283734	L	3	20688	L	83081410	000000	000000	105200	000026		G C=195,B=14

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
FA085	PHL197	28	1365	2151360	-062700	L	3	21103	L	83091920	000000	000000	205645	001300 501 V
FA085	PHL197	28	1336	2151360	-062700	L	1	01996	L	83091920	000000	000000	202713	002500 502 V
FI090	PK 2155-30	85	1332	2155582	-302753	L	3	21637	L	83112913	000000	000000	134805	120000 400 V
FI090	PK2155-306	85	9999	2155583	-302754	L	1	02330	L	83112912	000000	000000	124431	600000 402 V
FE176	PKS2155-30	87	1371	2155583	-302754	L	1	02189	L	83103120	000000	000000	203416	003400 402 V
EE082	PKS2155-30	87	1367	2155583	-302754	L	3	21418	L	83103114	000000	000000	143540	006000 300 V
GHFLH	00 18 PEG	24	0600	2157380	+062837	H	2	16508	L	83080310	000000	000000	105800	000900 G C=1.5X,B=40
GHFLH	00 18 PEG	24	0600	2157380	+062837	H	3	20593	L	83080310	000000	000000	104400	000920 G C=220,B=40
LGFSB	BD-03 5357	45	0940	2158008	-025851	L	3	21841	SL	83122203	034900	000340	033900	000720 G C=220,B=23
LGFSB	BD-03 5357	45	0940	2158008	-025851	L	1	02461	SL	83122202	024500	000800	023400	000900 G C=200,B=40
LGFSB	BD-03 5357	45	0940	2158008	-025851	L	1	02462	SL	83122204	050100	000800	044600	000900 G C=220,B=55
LGFSB	BD-03 5357	45	0940	2158009	-025852	H	3	21799	L	83121819	000000	000000	191000	022000 G C=190,B=62
LGFSB	BD-03 5357	45	0940	2158009	-025852	L	1	02429	SL	83121822	231500	001000	225600	000500 G C=10X,B=40
LGFSB	BD-03 5357	45	0940	2158009	-025852	L	3	21800	SL	83121823	235000	000700	233900	000400 G C=220,B=18
LGFSB	BD-03 5357	45	0940	2158009	-025852	L	3	21838	L	83122118	000000	000000	185200	018000 G E=92,B=48
LGFSB	BD-03 5357	45	0940	2158009	-025852	L	1	02459	L	83122122	000000	000000	221500	004000 G E=1.1X,C=125,B=41
RSFTS	00 FF AQR	45	0940	2158009	-025852	L	3	21699	L	83120605	000000	000000	050200	000500 G C=1.5X,B=16
LGFSB	BD-03 5357	45	0940	2158009	-025852	L	1	02460	L	83122200	000000	000000	003600	003500 G C=250,B=50
RSFTS	00 FF AQR	45	0940	2158009	-025852	L	3	21698	L	83120604	000000	000000	041400	001000 G C=3X,B=20
LGFSB	BD-03 5357	45	0940	2158009	-025852	L	3	21840	SL	83122201	015700	000640	014300	000720 G C=230,B=25
LGFSB	BD-03 5357	45	0940	2158009	-025852	L	3	21839	L	83122123	000000	000000	230100	008600 G E=66,B=40
AFFJL	HD 209369	41	0500	2158325	+725630	L	3	21178	L	83092708	000000	000000	083700	005000 G E=123,C=6-7X,B=85
FM079	HD209481	12	0568	2200235	574530	H	3	20975	L	83090820	000000	000000	203737	001000 701 V
FM079	HD209481	12	0568	2200235	574530	L	2	16755	LS	83090820	203259	000008	202737	000007 701 V 501$
FM079	HD209481	12	9999	2200235	574530	L	3	21006	LS	83091014	143020	000045	142711	000035 901 V 701$
BLFAG	OOSKY BKGD	07	9999	2200393	+420208	L	3	21718	L	83120723	000000	000000	232600	011000 G B=90
BLFAG	Q 2200+420	88	1500	2200394	+420209	L	1	02365	L	83120723	000000	000000	232400	014500 G B=250
FA050	HD209459	22	0598	2200520	110900	L	3	21399	L	83102919	000000	000000	191508	000015 500 V
FA050	HD209459	22	0598	2200520	110900	L	1	02172	LS	83102917	173757	000024	173431	000024 703 V 703$
FA050	HD209459	22	0599	2200520	110900	H	1	02173	L	83102918	000000	000000	184910	001000 503 V
FA050	HD209459	22	0595	2200520	110900	H	3	21398	L	83102918	000000	000000	181108	002500 501 V
FA050	HD209459	22	0599	2200520	110900	L	3	21397	LS	83102917	174540	000050	174147	000050 700 V 700$
FSFBH	00 AR LAC	39	0610	2206389	+452947	D	9	01480	L	83100412	000000	000000	121600	016000 G NO COMMENTS
RSFJL	HD 210334	44	0610	2206390	+452948	L	3	21234	L	83100501	000000	000000	015600	010000 G E=168,C=130,B=37
RSFJL	HD 210334	44	0610	2206390	+452948	H	2	16925	L	83100501	000000	000000	010500	004500 G E=148,C=130,B=35
RSFJL	HD 210334	39	0610	2206390	+452948	L	3	21223	L	83100322	000000	000000	223600	008000 G E=171,C=125,B=30
RSFJL	HD 210334	44	0610	2206390	+452948	L	3	21236	L	83100507	000000	000000	071000	008000 G E=160,C=125,B=39
RSFJL	HD 210334	44	0610	2206390	+452948	H	2	16928	L	83100508	000000	000000	083600	004500 G E=162,C=120,B=39
RSFJL	HD 210334	44	0610	2206390	+452948	L	3	21237	L	83100509	000000	000000	093100	006000 G E=146,C=120,B=47
RSFJL	HD 210334	39	0610	2206390	+452948	H	2	16922	L	83100412	000000	000000	122600	005500 G E=178,C=150,B=42
RSFJL	HD 210334	39	0610	2206390	+452948	L	3	21225	L	83100403	000000	000000	030500	008000 G E=113,B=35
RSFJL	HD 210334	44	0610	2206390	+452948	H	2	16926	L	83100503	000000	000000	034200	005500 G E=150,C=120,B=35
FC254	HD210334	46	9999	2206390	452948	E	9	01479	2	83100321	000000	000000	211100	016000 V FIELD FOR LWR16916
RSFJL	HD 210334	44	0610	2206390	+452948	H	2	16927	L	83100506	000000	000000	060900	005500 G E=169,C=140,B=40
RSFJL	HD 210334	44	0610	2206390	+452948	L	3	21235	L	83100504	000000	000000	044300	008000 G E=170,C=125,B=39

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
FC254	HD210334	46	0642	2206390	452948	L	2	16915	L	83100319	000000	000000	194441	001904 802 V
RSFJL	HD 210334	39	0610	2206390	+452948	H	2	16918	L	83100402	000000	000000	021600	004500 G E=141,C=100,B=35
FC254	HD210334	46	0645	2206390	452948	L	3	21222	L	83100320	000000	000000	201331	008000 341 V
RSFJL	HD 210334	39	0610	2206390	+452948	H	2	16916	L	83100321	000000	000000	213800	005000 G E=163,C=140,B=35
RSFJL	HD 210334	39	0610	2206390	+452948	H	2	16917	L	83100400	000000	000000	000500	004200 G E=126,C=112,B=35
RSFJL	HD 210334	39	0610	2206390	+452948	L	3	21224	L	83100400	000000	000000	005200	008000 G E=134,C=75,B=35
FC254	HD210334	46	0647	2206390	452948	L	3	21230	L	83100413	000000	000000	132755	008000 341 V EXPOSURE STARTED AT GSFC
MLFJL	HD 210745	47	0340	2209069	+575715	H	2	16881	L	83092710	000000	000000	100500	001500 G E=161,C=90,B=55
MLFJL	HD 210745	47	0340	2209069	+575715	H	1	02266	L	83111412	000000	000000	121100	003300 G E=225,C=85,B=33
IMFTS	HD 210839	15	0500	2209486	+591003	L	1	02030	SL	83101208	090200	000008	085200	000030 G C=3X,B=45
IMFTS	HD 210839	15	0500	2209486	+591003	L	3	21277	L	83101208	000000	000000	084300	000026 G E=190,C=220,B=17
IGFBS	HD 235783	23	0870	2215139	+541526	H	3	21706	L	83120623	000000	000000	231100	018000 G C=220,B=85
EI219	H2215-086	59	1375	2215172	-083607	L	3	21274	L	83101119	000000	000000	195648	004200 241 V
EI219	H 2215-086	59	1399	2215172	-083607	L	1	02029	L	83101120	000000	000000	204337	002100 342 V
EI219	H 2215-086	59	1336	2215172	-083607	L	2	16967	L	83101114	000000	000000	144124	006300 343 V
EI219	H 2215-086	59	1404	2215172	-083607	L	1	02027	L	83101117	000000	000000	171234	004200 443 V
EI219	H 2215-086	59	1397	2215172	-083607	L	3	21273	L	83101118	000000	000000	180159	006300 351 V
EI219	H2215-086	59	1385	2215172	-083607	L	1	02028	L	83101119	000000	000000	191002	004200 452 V
EI219	H 2215-086	59	1350	2215172	-083607	L	3	21272	L	83101116	000000	000000	160013	006300 342 V
EI219	H2215-086	59	1418	2215172	-083607	L	3	21275	L	83101121	000000	000000	211106	003100 331 V
CCFLH	HD 212330	44	0530	2221380	-580248	H	1	02202	L	83110305	000000	000000	051400	004000 G E=95,C=1.5X,B=52
QSFMS	Q 2223-052	85	0000	2223109	-051216	L	3	21212	L	83100122	000000	000000	224600	027000 G C=75,B=100
QSFMS	Q 2223-052	85	0000	2223110	-051217	L	2	16909	L	83100203	000000	000000	032000	015000 G C=65,B=42
BLFAG	Q 2223-056	85	1650	2223110	-051217	H	1	02355	L	83120522	000000	000000	225000	018000 G C=130,B=60
BLFAG	OOSKY BKGD	07	9999	2223110	-051216	L	3	21696	L	83120523	000000	000000	231500	012000 G B=32
FE260	MKN915	84	1400	2234071	-124815	L	2	16964	L	83101015	000000	000000	151609	037700 339 V SAO 165184 X=-617,Y=-1770
PHCAL	OO WAVCAL	98	9999	2234319	+732259	L	1	01972	S	83081514	144500	000001	000000	000000 G E=10X,B=108 TFLOO
PHCAL	OO WAVCAL	98	9999	2234319	+732259	H	1	01971	S	83081514	141300	000016	000000	000000 G E=50X,B=106 TFLOO
PHCAL	OO WAVCAL	98	9999	2234319	+732259	L	3	20700	S	83081513	135900	000002	000000	000000 G E=10X,B=109 TFLOO
PHCAL	OO WAVCAL	98	9999	2234319	+732259	L	3	20697	S	83081512	122600	000002	000000	000000 G E=10X,B=101 TFLOO
PHCAL	OONULLREAD	99	9999	2234319	+732259	H	1	01970	L	83081511	000000	000000	115600	000000 G B=20
PHCAL	OO WAVCAL	98	9999	2234319	+732259	L	2	16599	S	83081510	103400	000001	000000	000000 G E=10X,B=85 TFLOO
PHCAL	OO WAVCAL	98	9999	2234319	+732259	H	2	16600	S	83081511	110200	000016	000000	000000 G E=50X,B=115 TFLOO
PHCAL	OO TFLOOD	99	9999	2234319	+732259	H	3	20699	L	83081513	000000	000000	132700	000005 G B=109
PHCAL	OO TFLOOD	99	9999	2234319	+732259	H	1	01973	L	83081515	000000	000000	152800	000025 G B=102
PHCAL	OO WAVCAL	98	9999	2234319	+732259	H	3	20698	S	83081512	125400	000200	000000	000000 G E=50X,B=126 TFLOO
PHCAL	OO TFLOOD	99	9999	2234319	+732259	H	2	16601	L	83081511	000000	000000	113000	000007 G B=131
CCFTS	HD 214470	41	0520	2234320	+732300	L	3	21484	L	83110901	000000	000000	011000	006000 G E=71,C=15X,B=22
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	2	16936	L	83100612	000000	000000	121900	001800 G E=130,B=30
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	2	16920	L	83100408	000000	000000	081500	001800 G E=97,C=65,B=25
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	3	21228	L	83100408	000000	000000	085400	006000 G B=26
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	3	21245	L	83100611	000000	000000	110900	006000 G B=52
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	2	16921	L	83100409	000000	000000	095900	001800 G E=124,C=75,B=31
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	3	21243	L	83100607	000000	000000	073200	006000 G E=38,B=26
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	3	21227	L	83100407	000000	000000	071000	006000 G B=22

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
FSFBH	OOGL 867 A	48	0910	2236009	-205247	L	3	21219	L	83100311	000000	000000	112800	002000		G E=193,C=97,B=97
FSFBH	OOGL 867 A	48	0910	2236009	-205247	L	3	21218	L	83100309	000000	000000	092800	006000		G C=115,B=115
FSFBH	OOGL 867 A	48	0910	2236009	-205247	L	2	16912	L	83100310	000000	000000	103900	001800		G E=175,C=60,B=60
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	3	21244	L	83100609	000000	000000	091800	006000		G E=49,B=42
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	3	21229	L	83100410	000000	000000	103700	006000		G B=73
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	3	21226	L	83100405	000000	000000	052700	006000		G B=28
FSFBH	OOGL 867 A	48	0910	2236009	-205247	L	3	21217	L	83100307	000000	000000	071000	006000		G E=45,C=42,B=42
FSFBH	OOGL 867 A	48	0910	2236009	-205247	L	2	16911	L	83100308	000000	000000	084200	002400		G E=184,C=30,B=30
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	2	16933	L	83100607	000000	000000	070800	001800		G E=95,B=25
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	2	16934	L	83100608	000000	000000	083700	001800		G E=97,B=27
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	3	21246	L	83100613	000000	000000	131800	003500		G E=36,B=24
FSFBH	OO GL 867A	48	0910	2236009	-205247	L	2	16919	L	83100406	000000	000000	063100	001800		G E=95,C=63,B=24
FC254	HD214479	48	0917	2236010	-205248	L	3	21253	L	83100714	000000	000000	144448	000000	231	V 3 EXP.IN LAP,30 MIN EACH
FC254	HD214479	48	0914	2236010	-205248	L	3	21239	L	83100515	000000	000000	153043	000000	101	V 3EXP. 30 MIN EACH RP(-
FC254	HD214479	48	0910	2236010	-205248	L	3	21240	L	83100518	000000	000000	182222	000000	121	V 3EXP. 30 MIN EACH RP(-3
FC254	HD214479	48	0911	2236010	-205248	L	3	21241	L	83100520	000000	000000	204925	000000	101	V 2EXP 30MIM+23MIN RP(-3
FC254	HD214479	48	0912	2236010	-205248	L	2	16930	L	83100517	000000	000000	172700	000000	232	V 3EXP. IN LAP 8MIN EACH RP
FC254	HD214479	48	0909	2236010	-205248	L	2	16931	L	83100520	000000	000000	200144	000000	242	V 3EXP 8MIN EACH RP(5,
FSFBH	OO GL 867A	48	9999	2236010	-205248	L	2	16935	L	83100610	000000	000000	102900	001800		G E=115,B=30
MLFCW	HD 214680	12	0490	2237008	+384722	H	3	20771	L	83082415	000000	000000	155200	000045		G C=190,B=33
MLFCW	HD 214680	12	0490	2237008	+384722	H	3	20986	L	83090913	000000	000000	134200	000054		G C=220,B=38
MLFCW	HD 214680	12	0490	2237008	+384722	H	3	20876	L	83090111	000000	000000	114100	000054		G C=210,B=37
MLFCW	HD 214680	12	0490	2237008	+384722	H	3	20954	L	83090706	000000	000000	064900	000054		G C=220,B=38
MLFCW	HD 214680	12	0490	2237008	+384722	H	3	20835	L	83082911	000000	000000	115800	000054		G C=220,B=45
MLFCW	HD 214680	12	0490	2237008	+384722	H	3	20803	L	83082610	000000	000000	105800	000054		G C=210,B=40
MLFCW	HD 214680	12	0490	2237008	+384722	H	3	21048	L	83091407	000000	000000	074800	000054		G C=210,B=38
FA255	HD214680	12	0483	2237010	384700	H	3	21022	L	83091120	000000	000000	205110	000054	500	V
PHCAL	HD214680	13	0491	2237010	384722	L	1	01991	L	83090221	000000	000000	212039	000002	503	V TRAILED, RATE=9.9, ITER =
FA255	HD214680	12	0482	2237010	384700	H	3	21065	L	83091515	000000	000000	151529	000054	500	V
FA255	HD214680	12	0481	2237010	384700	H	3	21038	L	83091319	000000	000000	191009	000054	501	V
FC225	HD214952	49	0209	2239414	-470848	H	2	16898	L	83092913	000000	000000	134147	022500	679	V
CSFTA	HD 214952	49	0220	2239414	-470848	F	9	01474	L	83092913	000000	000000	135800	016000		G NO COMMENTS
FC225	WAVECAL	98	9999	2239414	-470848	H	2	16899	S	83092917	175544	000007	175703	000016	189	V $CONNECTED TO LWR16788
CSFTA	HD 214952	49	0220	2239414	-470848	H	2	16897	L	83092912	000000	000000	125300	001500		G E=2X,C=100,B=45
APFRP	HD 215441	36	0880	2242056	+551935	L	3	21391	L	83102908	000000	000000	081100	001000		G C=183,B=25
APFRP	HD 215441	36	0880	2242056	+551935	L	1	02112	L	83102308	000000	000000	082100	000400		G C=250,B=40
APFRP	HD 215441	36	0880	2242056	+551935	L	3	21328	L	83102308	000000	000000	080400	000700		G C=140,B=19
APFRP	HD 215441	36	0880	2242056	+551935	L	1	02185	L	83103107	000000	000000	075600	000320		G C=223,B=40
APFRP	HD 215441	36	0880	2242056	+551935	L	1	02152	L	83102710	000000	000000	105600	000320		G C=247,B=45
APFRP	HD 215441	36	0880	2242056	+551935	L	3	21413	L	83103108	000000	000000	080900	001000		G C=195,B=50
APFRP	HD 215441	36	0880	2242056	+551935	L	1	02136	L	83102508	000000	000000	083100	000320		G C=210,B=50
APFRP	HD 215441	36	0880	2242056	+551935	L	3	21354	L	83102508	000000	000000	081700	001000		G C=190,B=50
APFRP	HD 215441	36	0880	2242056	+551935	L	3	21377	L	83102711	000000	000000	110800	001000		G C=201,B=46
APFRP	HD 215441	36	0880	2242056	+551935	L	1	02167	L	83102908	000000	000000	082800	000140		G C=205,B=35
APFRP	HD 215441	36	0880	2242056	+551935	H	1	02168	L	83102909	000000	000000	090700	000500		G C=1.5X,B=42

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
FC044	EVLAC	48	1012	2244399	440433	L	3	21371	L	83102617	000000	000000	174749 011000	121 V
FC044	EV LAC	48	1014	2244399	440433	L	1	02131	L	83102418	000000	000000	185911 003000	251 V
FC044	EV LAC	48	1016	2244399	440433	L	1	02130	L	83102416	000000	000000	162952 003000	252 V
FC044	EVLAC	48	1014	2244399	440433	L	3	21370	L	83102615	000000	000000	153133 010000	131 V
FC044	EVLAC	48	1016	2244399	440433	L	3	21348	L	83102419	000000	000000	193417 013300	131 V
FC044	EV LAC	48	1015	2244399	440433	L	3	21347	L	83102417	000000	000000	170511 011000	131 V
FC044	EVLAC	48	1015	2244399	440433	L	1	02146	L	83102614	000000	000000	145711 003000	253 V
FC044	EVLAC	48	1007	2244399	440433	L	1	02147	L	83102617	000000	000000	171436 003000	241 V
FC044	EVLAC	48	1022	2244399	440433	L	3	21372	L	83102620	000000	000000	202814 008000	121 V
FC044	EV LAC	48	1014	2244399	440433	L	3	21346	L	83102415	000000	000000	151430 007000	230 V
FC044	EVLAC	48	1020	2244399	440433	L	1	02148	L	83102619	000000	000000	194048 004100	251 V
LGFRH	HD 216386	49	0380	2250004	-075046	L	2	16956	L	83100910	000000	000000	102000 000200	G E=209,C=140,B=25
QSFBW	PK2251+113	85	0000	2251405	+112039	L	3	21283	SL	83101222	225300	042000	225200 042000	G E=197,C=112,B=75
QSFBW	PK2251+113	85	0000	2251405	+112039	L	2	16969	L	83101123	000000	000000	231100 039500	G C=155,B=85
QSFAG	Q 2251+113	85	1580	2251406	+112039	L	2	16943	L	83100723	000000	000000	230200 040500	G C=160,B=69
FM004	HD217035	20	0798	2254330	623604	H	2	16595	L	83081421	000000	000000	213803 007500	403 V
FM004	HD217035	20	0798	2254330	623604	H	3	20696	L	83081422	000000	000000	225600 017100	502 V
FM004	HD217312	20	0760	2256410	624832	H	2	16594	L	83081418	000000	000000	184443 005500	503 V
FM004	HD217312	20	0766	2256410	624832	H	3	20695	L	83081419	000000	000000	194530 010000	402 V
LDFBH	OO GL 884	48	0790	2257358	-224734	L	1	02400	L	83121222	000000	000000	224200 006000	G E=2-3X,C=160,B=45
LDFBH	OO GL 884	48	0790	2257358	-224734	L	3	21758	L	83121218	000000	000000	183600 024000	G E=69,C=53,B=50
FE257	NGC 7469	84	1327	2300444	083618	L	2	16568	L	83081018	000000	000000	185827 009500	564 V
FE257	NGC 7469	84	1324	2300444	083618	L	3	20659	L	83081020	000000	000000	203858 015000	351 V
FE257	NGC 7469	84	1313	2300444	083618	L	2	16569	L	83081023	000000	000000	231302 015000	575 V
QSFWS	OOMCG25822	84	1410	2302071	-085719	L	3	20580	L	83080203	000000	000000	032200 008000	G E=118,C=70,B=27
QSFWS	OOMCG25822	84	1410	2302071	-085719	L	2	16499	L	83080204	000000	000000	045100 007000	G C=110,B=31
QSFWS	OOMCG25822	84	1410	2302072	-085720	L	1	02521	L	83122904	000000	000000	041400 007000	G C=235,B=134
QSFWS	OOMCG25822	84	1410	2302072	-085720	L	3	21903	L	83122902	000000	000000	025000 007500	G E=178,C=92,B=57
HCFSP	HD 192713	39	0520	2302072	-085720	H	1	02527	L	83122920	000000	000000	204100 003000	G E=197,C=115,B=40
CBFMP	HD 218393	66	0680	2304510	+495500	H	1	02196	L	83110207	000000	000000	075000 003000	G E=231,C=140,B=47
CBFMP	HD 218393	66	0680	2304510	+495500	H	3	21431	L	83110206	000000	000000	064400 006000	G E=1822,C=150,B=34
CCFTS	HD 218658	45	0450	2306180	+750701	L	3	21599	L	83112107	000000	000000	071400 000500	G C=220,B=70
LGFRH	HD 219215	49	0420	2311440	-061908	L	2	16955	L	83100909	000000	000000	093900 000300	G E=173,C=75,B=23
OX11K	OOKU813-14	37	1600	2316139	+121935	L	3	21802	L	83121902	000000	000000	025000 009000	G C=65,B=42
OX11K	OOKU813-14	37	1600	2316139	+121935	L	1	02430	L	83121904	000000	000000	042400 012000	G C=220,B=160
FA027	GD1110	28	1302	2316490	-090912	L	3	20560	L	83080102	000000	000000	023251 001300	501 V
HSFCW	OOFEIGE110	16	1190	2317235	-052622	L	3	21892	L	83122705	000000	000000	052900 000250	G C=220,B=25
HSFCW	OOFEIGE110	16	1190	2317235	-052622	L	1	02508	L	83122704	000000	000000	045600 001042	G C=3X,B=50
HSFCW	OOFEIGE110	16	1190	2317235	-052622	L	3	21891	L	83122704	000000	000000	041800 000415	G C=2X,B=22
HSFCW	OOFEIGE110	16	1190	2317235	-052622	L	1	02507	L	83122703	000000	000000	034900 001042	G C=3X,B=40
HSFCW	OOFEIGE110	16	1190	2317235	-052622	L	3	21890	L	83122703	000000	000000	031100 000415	G C=2X,B=20
HSFCW	OOFEIGE110	16	1190	2317235	-052622	L	1	02506	SL	83122702	024100	000658	022600 000328	G C=220,B=35
HSFCW	OOFEIGE110	16	1190	2317235	-052622	L	3	21889	SL	83122701	015200	000540	013600 000250	G C=220,B=25
HSFCW	OOFEIGE110	16	1190	2317235	-052622	L	1	02505	L	83122700	000000	000000	005600 000513	G C=1.5X,B=35
HSFCW	OOFEIGE110	16	1190	2317235	-052622	L	3	21888	L	83122700	000000	000000	004700 000330	G C=1.5X,B=15

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT
FI066	VY SCL	54	1600	2326213	-300315	L	1	02267	L	83111418	000000	000000	184943	005800	302	V
FI066	VY SCL	54	1600	2326213	-300315	L	3	21523	L	83111215	000000	000000	150133	012000	342	V
FI066	VY SCL	54	1600	2326213	-300315	L	3	21542	L	83111414	000000	000000	145246	023000	342	V
FI066	VY SCL	54	1600	2326214	-300316	L	1	02259	L	83111217	000000	000000	170750	015900	553	V
FC123	EQ-PEG	48	1009	2329200	193942	L	3	20831	L	83082823	000000	000000	234601	011800	131	V TWO EXP 56+62 MIN RP(4,
CCFTA	OO EQ PEG	48	1040	2329200	+193942	L	1	02256	L	83111208	000000	000000	084900	003000		G E=250,C=110,B=83
FC123	EQ-PEG	48	1011	2329200	193942	L	2	16691	L	83082820	000000	000000	204510	002500	353	V
FC123	EQ-PEG	48	1006	2329200	193942	L	2	16692	L	83082823	000000	000000	231321	002500	342	V
CCFTA	OO EQ PEG	48	1040	2329200	+193942	L	3	21461	L	83110607	000000	000000	074800	005200		G E=214,B=62
FC123	EQ-PEG	48	1012	2329200	193942	L	3	20830	L	83082821	000000	000000	211407	011200	131	V TWO EXP 56 MIN EACH RP (4
FC123	EQ-PEG	48	1012	2329200	193942	L	3	20829	L	83082818	000000	000000	184714	011200	131	V TWO EXP 56 MIN EACH RP (4
FC123	EQ-PEG	48	1006	2329200	193942	L	3	20820	L	83082723	000000	000000	234655	011600	131	V TWO EXP 55+61 MIN RP(4,
FC123	EQ-PEG	48	1006	2329200	193942	L	2	16683	L	83082723	000000	000000	231517	002500	342	V
CCFTA	OO EQ PEG	48	1040	2329200	+193942	L	1	02232	L	83110606	000000	000000	065900	004000		G E=1.5X,C=100,B=72
CCFTA	OO EQ PEG	48	1040	2329200	+193942	L	3	21519	L	83111207	000000	000000	074400	006000		G E=229,B=60
FC123	EQ-PEG	48	1009	2329200	193942	L	3	20819	L	83082721	000000	000000	211442	011000	131	V TWO EXP 55 MIN EACH RP (4
FC123	EQ-PEG	48	1010	2329200	193942	L	3	20818	L	83082718	000000	000000	184519	011000	131	V TWO EXP 55MIN EACH RP(4
FC123	EQ-PEG	48	1006	2329200	193942	L	2	16682	L	83082720	000000	000000	204215	002000	232	V
CSFTA	HD 222107	45	0390	2335064	+461113	L	3	21190	L	83092907	000000	000000	071400	005000		G E=202,C=130,B=80
CSFTA	HD 222107	45	0390	2335064	+461113	H	2	16895	L	83092908	000000	000000	081100	004500		G E=10X,C=250,B=55
CSFTA	HD 222107	45	0390	2335065	+461114	H	2	16889	L	83092813	000000	000000	131100	001500		G E=2-3X,C=160,B=55
FC225	HD222107	45	0424	2335065	461114	H	2	16890	L	83092814	000000	000000	141920	000500	462	V
CSFTA	OO WAVECAL	98	9999	2335065	+461114	H	3	21187	S	83092905	050800	000006	000000	000000		G E=3X,B=111 TFLOO
LGFSB	HD 222107	45	0390	2335065	+461114	L	3	21801	L	83121901	000000	000000	011000	002800		G E=136,C=60,B=32
CSFTA	HD 222107	45	0390	2335065	+461114	L	3	21460	L	83110604	000000	000000	044900	010500		G E=3X,C=180,B=70
LGFSB	HD 222107	45	0390	2335065	+461114	H	1	02464	L	83122208	000000	000000	085300	000500		G E=236,C=87,B=25
CSFTA	HD 222107	45	0390	2335065	+461114	H	3	21186	L	83092823	000000	000000	232200	075000		G E=2X,C=205,B=130
LGFSB	HD 222107	45	0390	2335065	+461114	L	3	21843	L	83122207	000000	000000	075600	005000		G E=163,C=80,B=40
LGFSB	HD 222107	45	0390	2335065	+461114	H	1	02463	L	83122207	000000	000000	072700	000500		G E=231,C=95,B=30
LGFSB	HD 222107	45	0390	2335065	+461114	L	3	21842	L	83122206	000000	000000	063000	005000		G E=211,C=130,BB=90
FC225	HD222107	45	0424	2335065	461114	H	2	16891	L	83092814	000000	000000	145959	003500	672	V
CSFTA	OO WAVECAL	98	9999	2335065	+461114	H	3	21188	S	83092905	053400	000018	000000	000000		G E=8X,B=110 TFLOO
CSFTA	HD 222107	45	0390	2335065	+461114	L	3	21189	L	83092906	000000	000000	060500	003000		G E=132,C=85,B=44
CSFTA	HD 222107	45	0390	2335065	+461114	H	2	16894	L	83092907	000000	000000	070500	000500		G E=180,C=70,B=28
CSFTA	HD 222107	45	0390	2335065	+461114	H	2	16893	L	83092904	000000	000000	043800	001500		G E=3X,C=125,B=25
OD13K	OORAQR JET	57	1200	2341145	-153337	L	1	02490	L	83122522	000000	000000	225900	012000		G E=2X,C=95,B=62
OD13K	OORAQR JET	57	1200	2341145	-153337	L	3	21873	L	83122518	000000	000000	184400	024000		G E=3X,C=90,B=50
OD13K	OORAQR STR	57	0945	2341145	-153337	L	3	21874	L	83122601	000000	000000	010900	004000		G E=1.5X,C=60,B=35
CSFHJ	OO TX PSC	50	0500	2343501	+031234	L	1	02511	L	83122722	000000	000000	225500	030000		G E=5X,C=1.5X,B=92
AFFNM	HD 223385	32	0080	2346232	+615612	H	2	16762	L	83090923	000000	000000	235200	010000		G C=2-3X,B=55
AFFNM	HD 223385	32	0080	2346232	+615612	H	2	16761	L	83090922	000000	000000	220400	004500		G C=220,B=40
AFFNM	HD 223385	32	0080	2346232	+615612	H	3	20995	L	83090922	000000	000000	225300	018000		G C=215,B=65
CSFHJ	HD 223392	50	0850	2346320	+060616	L	1	02512	L	83122804	000000	000000	044000	006000		G C=205,B=78
CCFTS	HD 223460	45	0580	2347096	+360852	L	3	21480	L	83110811	000000	000000	110400	004500		G E=43,C=83,B=32
CCFTS	HD 223460	45	0580	2347096	+360852	L	3	21483	L	83110822	000000	000000	223400	012000		G E=147,C=160,B=45

PRO	OBJECT	CL	MAG	R.A.	DEC	D	C	IMAGE	A	DATE	EXP.SMALL	EXP.LARGE	ECC	COMMENT	
FM079	HD224151	20	0620	2353026	570802	H	3	20973	L	83090818	000000	000000	182141	003800 701	V
FM079	HD224572	20	0503	2356277	552836	H	3	20971	L	83090816	000000	000000	160159	000300 501	V
CCFEB	HD 224617	41	0400	2356445	+063511	H	1	02414	L	83121505	000000	000000	052300	001200	G C=2-3X,B=73
CCFEB	HD 224617	41	0400	2356445	+063511	L	3	21775	L	83121504	000000	000000	041300	004000	G C=115,C=10-15X,B=40
FA010	SB939	20	1040	2357480	-394000	H	1	02163	L	83102814	000000	000000	145525	007200 402	V
PHCAL	HD 6300	20	0000	3029100	+504430	L	2	17162	L	83112802	000000	000000	025800	000008	G C=185,B=105 TFL00

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